MODEL G0965
2 HP EXTREME-SERIES METAL/ GRINDING DOWNDRAFT TABLE
OWNER'S MANUAL
(For models manufactured since 04/23)

#CSLW22659 PRINTED IN TAIWAN V1.12.24

******Keep for Future Reference******

⚠ WARNING!

This manual provides critical safety instructions on the proper setup, operation, maintenance, and service of this machine/tool. Save this document, refer to it often, and use it to instruct other operators.

Failure to read, understand and follow the instructions in this manual may result in fire or serious personal injury—including amputation, electrocution, or death.

The owner of this machine/tool is solely responsible for its safe use. This responsibility includes but is not limited to proper installation in a safe environment, personnel training and usage authorization, proper inspection and maintenance, manual availability and comprehension, application of safety devices, cutting/sanding/grinding tool integrity, and the usage of personal protective equipment.

The manufacturer will not be held liable for injury or property damage from negligence, improper training, machine modifications or misuse.

⚠ WARNING!

Some dust created by power sanding, sawing, grinding, drilling, and other construction activities contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. Some examples of these chemicals are:

- **Lead from lead-based paints.**
- **Crystalline silica from bricks, cement and other masonry products.**
- **Arsenic and chromium from chemically-treated lumber.**

Your risk from these exposures varies, depending on how often you do this type of work. To reduce your exposure to these chemicals: Work in a well ventilated area, and work with approved safety equipment, such as those dust masks that are specially designed to filter out microscopic particles.

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INTRODUCTION

Contact Info

We stand behind our machines! If you have questions or need help, contact us with the information below. Before contacting, make sure you get the **serial number** and **manufacture date** from the machine ID label. This will help us help you faster.

Grizzly Technical Support
1815 W. Battlefield
Springfield, MO 65807
Phone: (570) 546-9663
Email: techsupport@grizzly.com

We want your feedback on this manual. What did you like about it? Where could it be improved? Please take a few minutes to give us feedback.

Grizzly Documentation Manager
P.O. Box 2069
Bellingham, WA 98227-2069
Email: manuals@grizzly.com

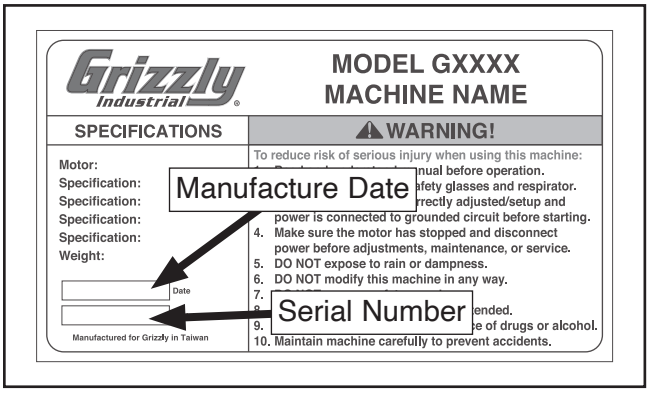
Manual Accuracy

We are proud to provide a high-quality owner's manual with your new machine!

We made every effort to be exact with the instructions, specifications, drawings, and photographs in this manual. Sometimes we make mistakes, but our policy of continuous improvement also means that **sometimes the machine you receive is slightly different than shown in the manual**.

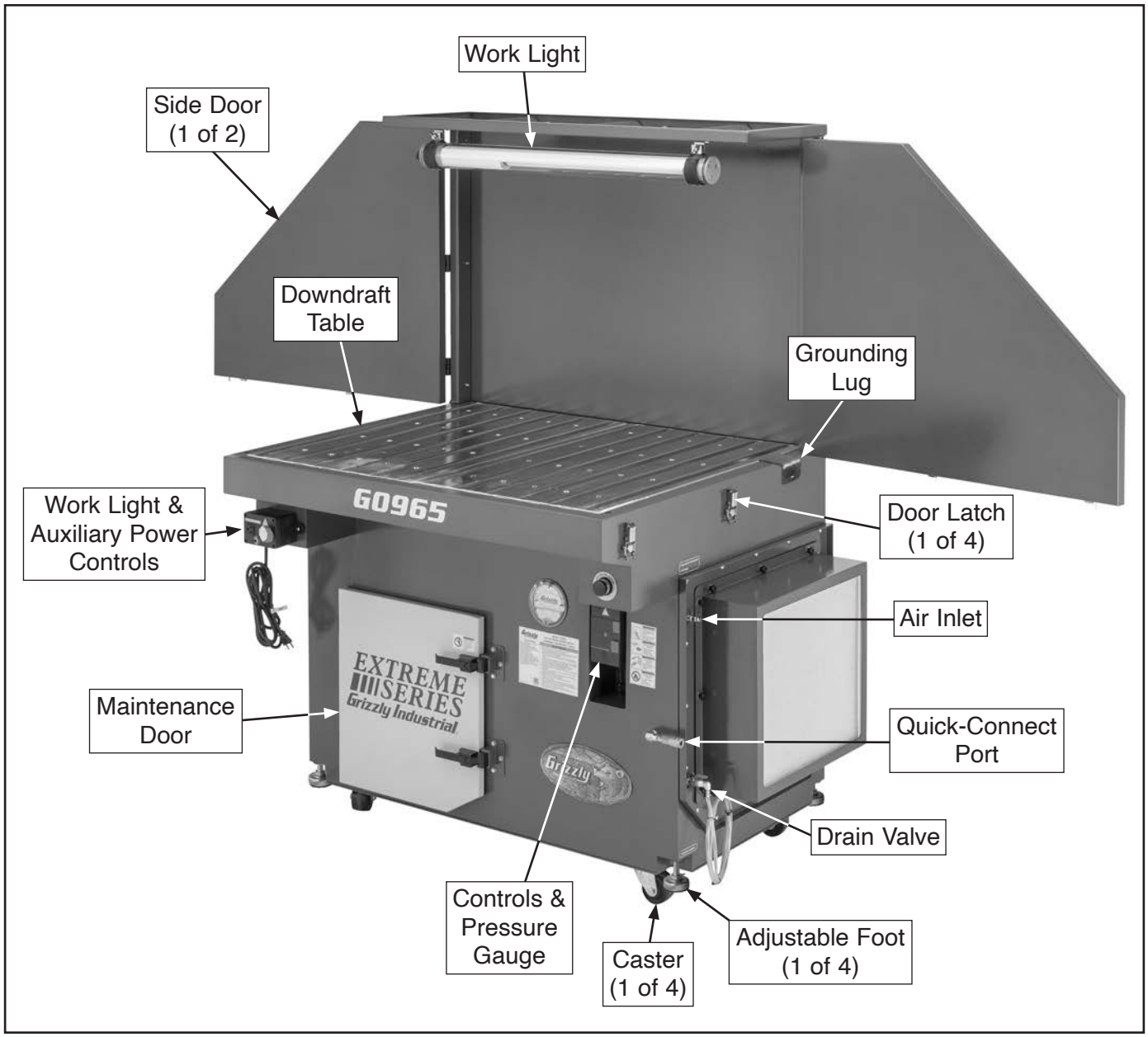
If you find this to be the case, and the difference between the manual and machine leaves you confused or unsure about something, check our website for an updated version. We post current manuals and manual updates for free on our website at **www.grizzly.com**.

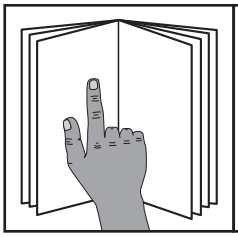
Alternatively, you can call our Technical Support for help. Before calling, make sure you write down the **manufacture date** and **serial number** from the machine ID label (see below). This information is required for us to provide proper tech support, and it helps us determine if updated documentation is available for your machine.



Identification

Become familiar with the names and locations of the controls and features shown below to better understand the instructions in this manual.

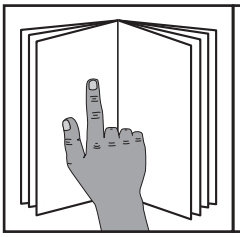




⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

Controls & Components



⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

Refer to the following figures and descriptions to become familiar with the basic controls and components of this machine. Understanding these items and how they work will help you understand the rest of the manual and minimize your risk of injury when operating this machine.

Table Components

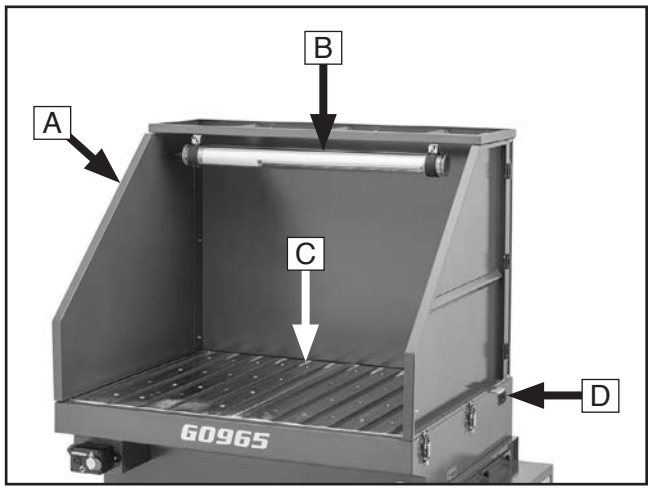


Figure 1. Table components.

A. Side Door (1 of 2): Contains sparks, fumes, and dust produced by operation so they can be drawn into filter compartment by impeller. Doors can also be opened to allow for larger workpieces.

B. Work Light: Illuminates table for better visibility. Requires auxiliary power connection.

C. Grated Table: Provides work surface and ⅝" mounting holes for clamps and jigs. Table removes for cleaning and maintenance.

D. Grounding Lug: Provides easy-access connection point for grounding table during welding operations.

Controls & Pressure Gauge

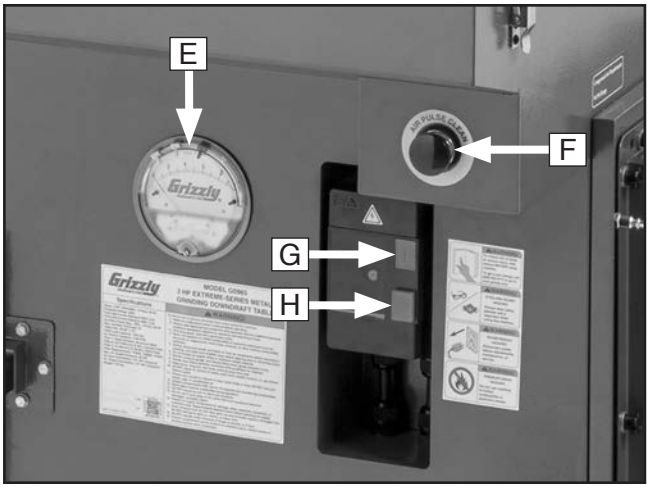


Figure 2. Power and pneumatic controls and pressure gauge.

E. Pressure Gauge: Displays vacuum pressure, indicating soil level of filters. Use pneumatic cleaning system daily to clean canister filters. Remove and clean canister filters when operating pressure exceeds 6 inAq. Replace filters when cleaning does not improve performance.

F. AIR PULSE CLEAN Button: Pulses compressed air to clean canister filters.

G. ON Button: Turns power to motor ***ON***.

H. OFF Button: Turns power to motor ***OFF***.

Auxiliary Power

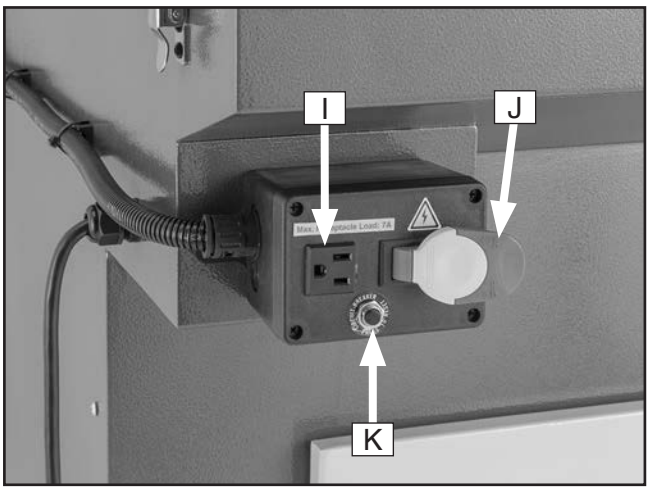


Figure 3. Auxiliary power components.

I. 120V Outlet: Provides 120V power connection for hand-held tool with full-load current rating of up to 7A.

J. Auxiliary Power ON/OFF Paddle Switch w/ Removable Key: Turns work light **ON** and supplies power to 120V outlet when moved left; turns work light ***OFF*** and cuts off power to 120V outlet moved right. When key is removed, switch is disabled.

K. Auxiliary Power Reset: Prevents work light and auxiliary-connected tool from overloading power supply circuit. To reset, move auxiliary power ON/OFF switch to OFF position, then press reset.

Pneumatic Components

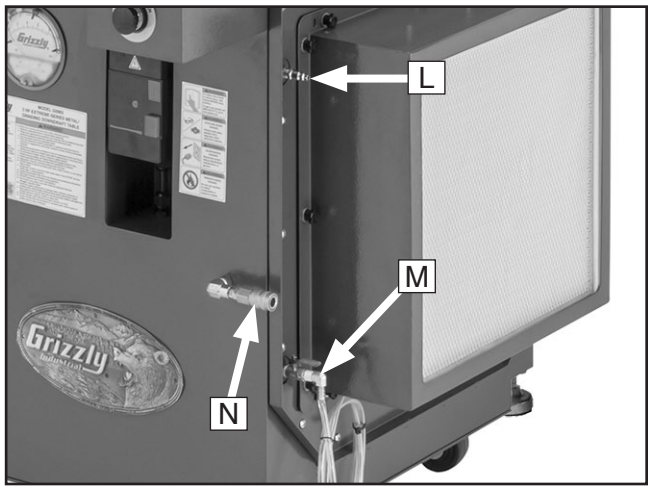


Figure 4. Pneumatic components.

L. Air Inlet: Accepts industrial-style quick-connect coupler with ¼" coupling size for compressed air supply. When compressed air is connected, AIR PULSE CLEAN button can be used to clean canister filters. Air supply should not exceed 90 PSI.

M. Drain Valve: Drains built-up moisture from tank when ball valve is opened.

N. Quick-Connect Port: Secures and releases industrial-style plug with ¼" coupling size on air hose when pressed in. Connect air tool requiring 90 PSI or less.

Maintenance Compartment

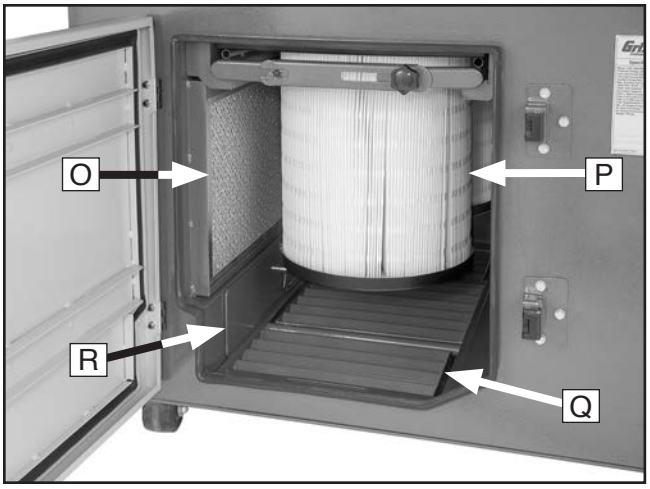


Figure 5. Maintenance compartment components.

O. Aluminum Mesh Filter: Arrests sparks and stops larger particles from entering other filters.

P. Canister Filter (1 of 2): Filters 95% of particles from 0.2–2 microns in size to maintain airflow and extend life of HEPA filter.

Q. Dust Tray: Collects dust and debris displaced when canister filters are pneumatically cleaned.

R. Dust Drawer: Collects dust and debris stopped by aluminum mesh filter.

⚠WARNING

Like all machinery there is potential danger when operating this machine. Accidents are frequently caused by lack of familiarity or failure to pay attention. Use this machine with respect and caution to decrease the risk of operator injury. If normal safety precautions are overlooked or ignored, serious personal injury may occur.

MACHINE DATA SHEET

Customer Service #: (570) 546-9663 · To Order Call: (800) 523-4777 · Fax #: (800) 438-5901

MODEL G0965
2 HP EXTREME-SERIES METAL/GRINDING DOWNDRAFT TABLE

Product Dimensions:

Weight	776 lbs.
Width (side-to-side) x Depth (front-to-back) x Height	56 x 39 x 74 in.
Footprint (Length x Width)	47-1/2 x 27 in.

Shipping Dimensions:

Type	Wood Crate
Content	Machine
Weight	1019 lbs.
Length x Width x Height	58 x 46 x 80 in.
Must Ship Upright	Yes

Main Electrical:

Power Requirement	230V or 460V, 3-Phase, 60 Hz
Prewired Voltage	230V
Full-Load Current Rating	6.6A at 230V, 3.3A at 460V
Minimum Circuit Size	15A
Connection Type	Cord & Plug at 230V, Permanent (Hardwire) at 460V
Power Cord Included	Yes
Power Cord Length	118 in.
Power Cord Gauge	14 AWG
Plug Included	No
Recommended Plug Type	15-20 for 230V
Switch Type	Magnetic Switch w/Overload Protection

Work Light/Auxiliary Electrical:

Power Requirement	120V, Single-Phase, 60 Hz
Full-Load Current Rating	7A
Minimum Circuit Size	15A
Connection Type	Cord & Plug
Power Cord Included	Yes
Power Cord Length	117 in.
Power Cord Gauge	14 AWG
Plug Included	Yes
Included Plug Type	5-15
Switch Type	Paddle Safety Switch w/Removable Key
Number of Lights	1
Lighting Type	20W Fluorescent, 23-1/4 in.

Motors:

Main

Horsepower	2 HP
Phase	3-Phase
Amps	6.6A/3.3A
Speed	3450 RPM
Type	TEFC Induction
Power Transfer	Direct
Bearings	Shielded & Permanently Lubricated

Main Specifications:

Operation Information

Air Suction Capacity	1350 CFM
Inlet Hole Area	1.6 sq. ft.
Outlet Size	20 x 18 in.
Air Input Connection Type	Industrial Quick-Coupler Plug (Male)
Air Input Connection Size	1/4" NPT Threads, 1/4" Body
Tank Size	1 Gallon
Maximum Tank Pressure	90 PSI
Air Output Connection Type	Industrial Quick-Coupler (Female)
Air Output Connection Size	1/4" NPT Threads, 1/4" Body
Drain Valve Type	Ball Valve

Filter Information

Number of Filters	4
Number of First-Stage Filters	1
First-Stage Filter Type	Spark Arrestor Aluminum Mesh Filter
First-Stage Filter Size	630 x 285 x 22mm
Number of Second-Stage Filters	2
Second-Stage Filter Type	Canister Filter
Second-Stage Filter Rating	0.2 - 2 Microns @ 95%
Second-Stage Filter Size	285 x 330mm
Second-Stage Filter Surface Area	107.6 sq. ft.
Number of Third-Stage Filters	1
Third-Stage Filter Type	HEPA Filter
Third-Stage Filter Rating	0.3 Microns @ 99.99%
Third-Stage Filter Size	457 x 508 x 150mm
Third-Stage Filter Surface Area	134.5 sq. ft.

Impeller Information

Impeller Type	Radial Fin
Impeller Size	12.1 in.
Impeller Blade Thickness	0.16 in.

Table Information

Table Length	35-5/8 in.
Table Width	44 in.
Floor to Table Height	40-1/2 in.
Table Load Capacity	1543 lbs.
Number of Table Inserts	2
Table Fixture Hole Size	5/8 in. (Unthreaded)

Construction

Cabinet	Steel
Casters	Rubber
Impeller	Aluminum
Table	Steel
Table Inserts	Steel
Paint Type/Finish	Powder Coated

Other Specifications:

Country of Origin	Taiwan
Warranty	1 Year
Approximate Assembly & Setup Time	30 Minutes
Serial Number Location	ID Label
ISO 9001 Factory	Yes

SECTION 1: SAFETY

For Your Own Safety, Read Instruction Manual Before Operating This Machine

The purpose of safety symbols is to attract your attention to possible hazardous conditions. This manual uses a series of symbols and signal words intended to convey the level of importance of the safety messages. The progression of symbols is described below. Remember that safety messages by themselves do not eliminate danger and are not a substitute for proper accident prevention measures. Always use common sense and good judgment.

⚠DANGER **Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠WARNING **Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠CAUTION **Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

NOTICE **Alerts the user to useful information about proper operation of the machine to avoid machine damage.**

Safety Instructions for Machinery

⚠WARNING

OWNER'S MANUAL. Read and understand this owner's manual BEFORE using machine.

TRAINED OPERATORS ONLY. Untrained operators have a higher risk of being hurt or killed. Only allow trained/supervised people to use this machine. When machine is not being used, disconnect power, remove switch keys, or lock-out machine to prevent unauthorized use—especially around children. Make your workshop kid proof!

DANGEROUS ENVIRONMENTS. Do not use machinery in areas that are wet, cluttered, or have poor lighting. Operating machinery in these areas greatly increases the risk of accidents and injury.

MENTAL ALERTNESS REQUIRED. Full mental alertness is required for safe operation of machinery. Never operate under the influence of drugs or alcohol, when tired, or when distracted.

ELECTRICAL EQUIPMENT INJURY RISKS. You can be shocked, burned, or killed by touching live electrical components or improperly grounded machinery. To reduce this risk, only allow qualified service personnel to do electrical installation or repair work, and always disconnect power before accessing or exposing electrical equipment.

DISCONNECT POWER FIRST. Always disconnect machine from power supply BEFORE making adjustments, changing tooling, or servicing machine. This prevents an injury risk from unintended startup or contact with live electrical components.

EYE PROTECTION. Always wear ANSI-approved safety glasses or a face shield when operating or observing machinery to reduce the risk of eye injury or blindness from flying particles. Everyday eyeglasses are NOT approved safety glasses.

⚠WARNING

WEARING PROPER APPAREL. Do not wear loose clothing, gloves, neckties, or jewelry that can become entangled in moving parts. Always tie back or cover long hair. Wear non-slip footwear to reduce risk of slipping and losing control or accidentally contacting cutting tool or moving parts.

HAZARDOUS DUST. Dust created by machinery operations may cause cancer, birth defects, or long-term respiratory damage. Be aware of dust hazards associated with each workpiece material. Always wear a NIOSH-approved respirator to reduce your risk.

HEARING PROTECTION. Always wear hearing protection when operating or observing loud machinery. Extended exposure to this noise without hearing protection can cause permanent hearing loss.

REMOVE ADJUSTING TOOLS. Tools left on machinery can become dangerous projectiles upon startup. Never leave chuck keys, wrenches, or any other tools on machine. Always verify removal before starting!

USE CORRECT TOOL FOR THE JOB. Only use this tool for its intended purpose—do not force it or an attachment to do a job for which it was not designed. Never make unapproved modifications—modifying tool or using it differently than intended may result in malfunction or mechanical failure that can lead to personal injury or death!

AWKWARD POSITIONS. Keep proper footing and balance at all times when operating machine. Do not overreach! Avoid awkward hand positions that make workpiece control difficult or increase the risk of accidental injury.

CHILDREN & BYSTANDERS. Keep children and bystanders at a safe distance from the work area. Stop using machine if they become a distraction.

GUARDS & COVERS. Guards and covers reduce accidental contact with moving parts or flying debris. Make sure they are properly installed, undamaged, and working correctly BEFORE operating machine.

FORCING MACHINERY. Do not force machine. It will do the job safer and better at the rate for which it was designed.

NEVER STAND ON MACHINE. Serious injury may occur if machine is tipped or if the cutting tool is unintentionally contacted.

STABLE MACHINE. Unexpected movement during operation greatly increases risk of injury or loss of control. Before starting, verify machine is stable and mobile base (if used) is locked.

USE RECOMMENDED ACCESSORIES. Consult this owner's manual or the manufacturer for recommended accessories. Using improper accessories will increase the risk of serious injury.

UNATTENDED OPERATION. To reduce the risk of accidental injury, turn machine ***OFF*** and ensure all moving parts completely stop before walking away. Never leave machine running while unattended.

MAINTAIN WITH CARE. Follow all maintenance instructions and lubrication schedules to keep machine in good working condition. A machine that is improperly maintained could malfunction, leading to serious personal injury or death.

DAMAGED PARTS. Regularly inspect machine for damaged, loose, or mis-adjusted parts—or any condition that could affect safe operation. Immediately repair/replace BEFORE operating machine. For your own safety, DO NOT operate machine with damaged parts!

MAINTAIN POWER CORDS. When disconnecting cord-connected machines from power, grab and pull the plug—NOT the cord. Pulling the cord may damage the wires inside. Do not handle cord/plug with wet hands. Avoid cord damage by keeping it away from heated surfaces, high traffic areas, harsh chemicals, and wet/damp locations.

EXPERIENCING DIFFICULTIES. If at any time you experience difficulties performing the intended operation, stop using the machine! Contact our Technical Support at (570) 546-9663.

Additional Safety for Metal Downdraft Tables

⚠WARNING

Death, poisoning, respiratory damage, blindness, cancer, birth defects, and amputation can occur from improperly using or servicing machine. Explosions or fire can result if machine is used to capture incorrect materials or if exposed to an ignition source. Users must be trained on potential hazards, manufacturer's operating procedures, use of personal protective equipment (PPE), emergency procedures, and safety precautions for operations. To reduce these risks, operator and bystanders MUST completely heed the warnings below.

INTENDED USE. This machine is designed to capture fumes, sparks, and particles created while grinding, welding, and performing allied processes. Machine does NOT protect against highly hazardous materials, such as lead dust, asbestos fibers, or radioactive particles. DO NOT use machine to capture wood, lead, combustible or explosive metal dust, asbestos, glass, crystalline silica, gypsum, biohazards, paint, liquids, or other non-metal products. DO NOT modify machine for a different purpose, to bypass safety measures, or to exceed machine capacity.

PROPER PPE. Cutting, grinding, etc. ejects particles at a high rate of speed and can cause cancer, birth defects, and eye, skin, and lung injuries. Welding and allied processes can produce fumes that suffocate or poison, sparks and spatter that burn and corrode, radiation that burns skin and damages eyes, and electricity that shocks. Loud operations can permanently affect hearing. Read and understand all safety warnings provided by manufacturer for any machine used with table. Take proper precautions and wear proper clothing and personal protective equipment.

TOXIC MATERIALS. Exposure to certain dusts or fumes can result in potentially deadly health effects. Research toxic effects and exposure limits of materials you work with, consumables needed for operation, atmospheric contaminants, material coatings, cleaners, and combinations of these, and always seek to minimize/eliminate exposure to yourself and others. If downdraft table malfunctions, immediately stop use and correct the issue.

FIRE & EXPLOSIONS. Keep flammable materials and ignition sources at least 35 ft. from table. Fumes, sparks, and fine metal dust particles from grinding, welding, and allied processes can ignite, depending on material type and circumstances. Be prepared to safely fight a combustible metal fire. NEVER use this table to capture magnesium, aluminum, titanium, niobium, tantalum, zirconium, or hafnium. Inspect compartments for smoldering combustibles before leaving machine unattended.

VENTILATION. Do not weld or perform allied processes in confined space without adequate ventilation. Downdraft table does not replace oxygen that is consumed by operations. Suffocation or explosion can occur if this warning is ignored. Sample air to determine need for additional ventilation. If preventative measures taken do not reduce hazards to a safe level, those inside work area should wear air-line respirators. Have personnel monitor the operator from outside operating area in case of equipment failure.

MAINTENANCE. Inspect equipment and repair or replace defective components prior to operations. Only operate machine with correct filters installed. Empty trays/drawers and clean/replace filters regularly to prevent fire and explosion. Always use vacuum equipped with a HEPA filter to clear waste or dust; DO NOT use hands or compressed air. Wear approved safety goggles, respirator, and protective gloves rated for fumes and materials, and deposit waste into an approved, closed-top metal container, minimizing amount of particulates allowed to become airborne. Dispose of waste according to local regulations for material type.

IMPELLER. To reduce risk of entanglement and amputation, DO NOT place hands, hair, clothing, or tools near impeller during operation.

MOVING/SERVICING. Disconnect power and allow impeller to come to a complete stop before moving machine, opening doors or covers, or servicing machine to prevent entanglement and amputation. Lock casters prior to operation.

Additional Safety for Compressed Air

⚠WARNING

Serious impact injuries can occur from bursting air components. Eyes and other soft tissues can be easily injured by air streams and debris projected by compressed air. To reduce these risks, operator and bystanders MUST completely heed the warnings below.

AIR SUPPLY. Only supply clean, dry, regulated compressed air for downdraft table. Never exceed maximum operating pressure or components may burst and cause injury. Never use oxygen, carbon dioxide, combustible gases, or any bottled gas as air source, as these can explode. DO NOT use compressed air as breathable air supply.

PROPER PPE. Always wear ANSI-approved eye protection and any additional personal protective equipment required by attachment tools. Pneumatic tools can propel objects and debris at high speeds or even explode. Air escaping from pneumatic tools and connections can exceed safe exposure limits and may cause hearing damage with prolonged exposure.

ATTACHMENT AIR TOOLS. DO NOT exceed pressure ratings of attachments as lines and seals may burst. Never use damaged tools—they are more likely to rupture. DO NOT aim compressed air at body parts or people, as it can injure or propel debris into eyes or other soft tissues. Use proper air hose for tool and confirm air hose is long enough to reach work area without stretching. Do not carry attachment tool with hand on trigger to reduce risk of accidental firing. Always relieve line pressure before connecting or disconnecting air supply or tools. Disconnect air supply and any air tools from downdraft table when not in use.

MODIFICATIONS. DO NOT adjust or remove safety relief valve. Safety relief valve is designed and adjusted for correct tolerances and abilities of machine to keep tank and other components from bursting.

INTEGRITY OF AIR COMPONENTS. Sparks, slag, and flames from operations performed on downdraft table can damage supply air compressor if it is too close. Locate air compressor at least 35 ft. away or use some kind of fire resistant shield to protect it. Inspect air tank, attachment tools, hoses, fittings, and valves for rust, damage, leaks, weakness, looseness, or excessive wear and repair/replace damaged components before operating. Do not attempt to modify, weld on, or repair tank because doing so could cause it to burst. Replace a damaged tank immediately.

DAILY MAINTENANCE. Drain moisture from tank daily to prevent internal corrosion that could weaken tank.

SERVICING. To prevent impact and soft tissue injuries, bleed air from system and disconnect tools and hoses before servicing machine or air components.

LEAVING UNATTENDED. To prevent accidental injury or explosion, disconnect air supply when leaving machine unattended.

Meeting Welding Fume Extraction Codes & Standards

Welding metals can give off poisonous fumes containing zinc, lead, beryllium, cadmium, mercury, fluorine, hexavalent chromium, and others. These fumes typically originate from fluxes, anti-corrosion coatings, pigments, metal fillers, and residual chemicals on the workpiece. This machine is designed to help meet the welding shop clean air requirements mandated by OSHA beginning in 2006. The Model G0965 Downdraft Table is designed to be a part of an overall fume control system. It is NOT designed to serve as a "single-solution" for keeping workers safe from all welding fumes. You must contact OSHA to find out how to design and maintain the best overall welding fume control system for your work station or shop. Often, depending on the workspace size, volume of work, type of material to be welded, or other special circumstances, you must use additional safety equipment such as personal air line respirators, hoods, masks, and complete body protection.

Contact the organizations below to help you meet welding fume extraction requirements:

Occupational Safety and Health Administration (OSHA).

— Code of Federal Regulations, Title 29 Labor, Parts 1910.1 to 1910.1450, available from the U.S. Government Printing Office, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954 (telephone: 800-321-6742; web site: www.osha.gov).

American Welding Society (AWS), 8669 NW 36 Street, #130, Miami, FL 33166-6672 (telephone: 800-443-9353; web site: www.aws.org).

— Safety & Health Fact Sheets

American National Standards Institute (ANSI), 25 West 43rd Street, 4th Floor, New York, NY 10036 (telephone: 212-642-4900; web site: www.ansi.org).

— ANSI Z49.1, Safety in Welding, Cutting, and Allied Processes

National Institute for Occupational Safety and Health (NIOSH).

— Safety and Health in Arc Welding and Gas Welding and Cutting, NIOSH Publication No. 78-138. Cincinnati, OH (telephone: 800-356-4674; web site: http://www.cdc.gov/niosh).

International Agency For Research On Cancer (IARC).

— Monographs on the Evaluation of Carcinogenic Risks to Humans, Chromium, Nickel, and Welding, Vol. 49 (1990), Oxford University Press, 198 Madison Avenue, New York, NY 10016 (telephone: 212-726-6000; web site: www.oup-usa.org).

National Fire Protection Association (NFPA), P. O. Box 9101, 1 Batterymarch Park, Quincy, MA 02269-9101 (telephone: 617-770-3000; website: www.nfpa.org).

— NFPA Standard 70, National Electrical Code

— NFPA Standard 51, Standard for the Design and Installation of Oxygen-Fuel Gas Systems for Welding, Cutting, and Allied Processes

— NFPA Standard 51B, Standard for Fire Prevention During Welding, Cutting, and Other Hot Work

American Conference of Governmental Industrial Hygienists (ACGIH).

— Documentation of the Threshold Limit Values and Biological Exposure Indices, available from ACGIH, 3640 Park 42 Drive, Cincinnati, OH 45241 (telephone: 513-742-2020; web site: www.acgih.org).

SECTION 2: POWER SUPPLY

Availability

Before installing the machine, consider the availability and proximity of the required power supply circuit. If an existing circuit does not meet the requirements for this machine, a new circuit must be installed. To minimize the risk of electrocution, fire, or equipment damage, installation work and electrical wiring must be done by an electrician or qualified service personnel in accordance with all applicable codes and standards.

⚠WARNING

Electrocution, fire, shock, or equipment damage may occur if machine is not properly grounded and connected to power supply.

Full-Load Current Rating

The full-load current rating is the amperage a machine draws at 100% of the rated output power. On machines with multiple motors, this is the amperage drawn by the largest motor or sum of all motors and electrical devices that might operate at one time during normal operations.

Machine 230V Full-Load Current Rating..6.6A
Machine 460V Full-Load Current Rating..3.3A

The full-load current is not the maximum amount of amps that the machine will draw. If the machine is overloaded, it will draw additional amps beyond the full-load rating.

If the machine is overloaded for a sufficient length of time, damage, overheating, or fire may result—especially if connected to an undersized circuit. To reduce the risk of these hazards, avoid overloading the machine during operation and make sure it is connected to a power supply circuit that meets the specified circuit requirements.

While this machine requires a power supply in order to run the motor and main controls, the Model G0965 also has a separate cord to provide auxiliary power. This auxiliary power connection powers the work light and allows for a 120V, single-phase tool to be connected. Do not connect a tool with a full-load current rating that exceeds the value below.

Aux. 120V Full-Load Current Rating.....7A

Circuit Information

A power supply circuit includes all electrical equipment between the breaker box or fuse panel in the building and the machine. The power supply circuit used for this machine must be sized to safely handle the full-load current drawn from the machine for an extended period of time. (If this machine is connected to a circuit protected by fuses, use a time delay fuse marked D.)

⚠CAUTION

For your own safety and protection of property, consult an electrician if you are unsure about wiring practices or electrical codes in your area.

Note: *Circuit requirements in this manual apply to a dedicated circuit—where only one machine will be running on the circuit at a time. If machine will be connected to a shared circuit where multiple machines may be running at the same time, consult an electrician or qualified service personnel to ensure circuit is properly sized for safe operation.*

Main Power Supply

Refer to this section for the power requirements for the Model G0965 motor and main controls.

230V Circuit Requirements

This machine is prewired to operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 208V, 220V, 230V, 240V
Cycle ..... 60 Hz
Phase 3-Phase
Power Supply Circuit ..... 15 Amps
Plug/Receptacle ..... NEMA 15-20
Cord ..... "S"-Type, 4-Wire, 14 AWG, 600 VAC

230V Connection Type

The power cord and plug specified under "Circuit Requirements for 230V" has an equipment-grounding wire and a grounding prong. The plug must only be inserted into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances (see figure below).

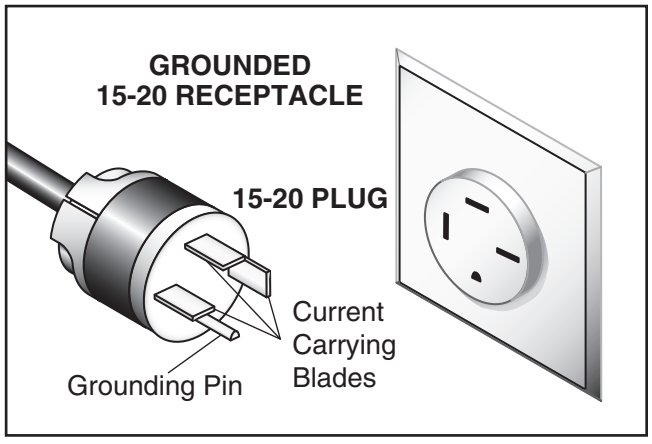


Figure 6. Typical 15-20 plug and receptacle.

230V Grounding Instructions

This machine MUST be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

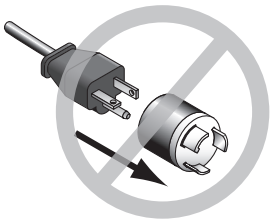
Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the tool is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

⚠WARNING

Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.

⚠CAUTION



No adapter should be used with plug. If plug does not fit available receptacle, or if machine must be reconnected for use on a different type of circuit, reconnection must be performed by an electrician or qualified service personnel, and it must comply with all local codes and ordinances.

Extension Cords (230V Only)

We do not recommend using an extension cord with this machine. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used with this machine must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size .....18 AWG
Maximum Length (Shorter is Better).....50 ft.

460V Circuit Requirements

This machine can be converted to operate on a power supply circuit that has a verified ground and meets the requirements listed below. (Refer to **Voltage Conversion** instructions for details.)

Nominal Voltage 440V, 480V
Cycle .....60 Hz
Phase 3-Phase
Power Supply Circuit ..... 15 Amps

460V Connection Type

A permanently connected (hardwired) power supply is typically installed with wires running through mounted and secured conduit. A disconnecting means, such as a locking switch (see following figure), must be provided to allow the machine to be disconnected (isolated) from the power supply when required. This installation must be performed by an electrician in accordance with all applicable electrical codes and ordinances.

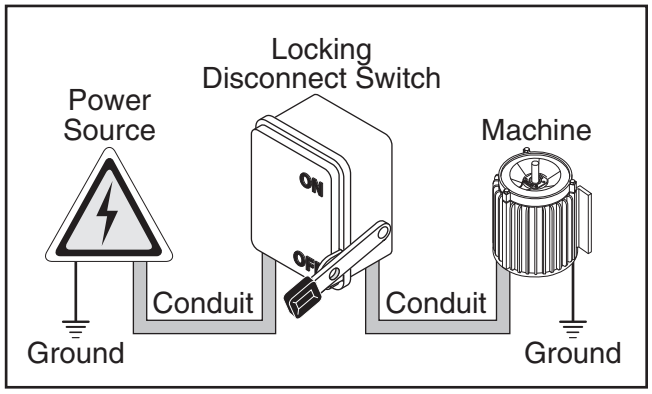


Figure 7. Typical setup of a permanently connected machine.

460V Grounding Instructions

In the event of a malfunction or breakdown, grounding provides a path of least resistance for electrical current to reduce the risk of electric shock. A permanently connected machine must be connected to a grounded metal permanent wiring system; or to a system having an equipment-grounding conductor. All grounds must be verified and rated for the electrical requirements of the machine. Improper grounding can increase the risk of electric shock!

⚠WARNING

Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.

3-Phase Power

This machine requires 3-phase power. DO NOT use a static phase converter to create 3-phase power—it can quickly decrease the life of electrical components on this machine. If you must use a phase converter, only use a rotary phase converter.

You can find the Model G7979, a compatible phase converter on our website.

G7979—20 HP Rotary Phase Converter
This rotary phase converter allows you to operate 3-phase machinery from a single-phase power source at 100% power and 95% efficiency.

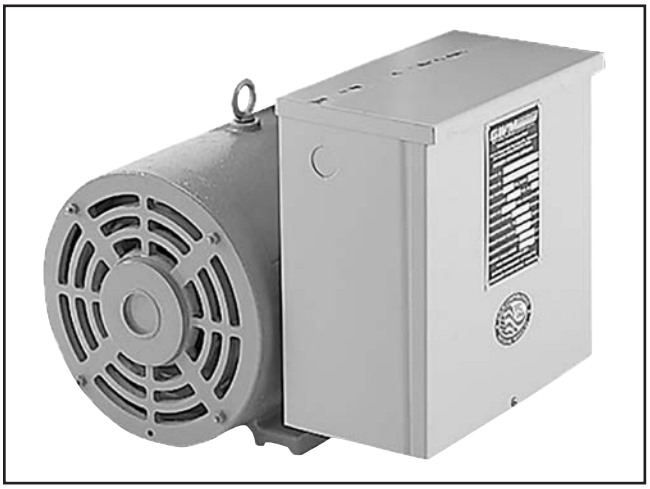


Figure 8. Model G7979 20 HP Rotary Phase Converter.

Auxiliary Power Supply

Refer to this section for the power requirements for the Model G0965 work light and tool outlet.

120V Circuit Requirements

The work light and 120V outlet will operate on a power supply circuit that has a verified ground and meets the following requirements:

Nominal Voltage 110V, 115V, 120V
Cycle ..... 60 Hz
Phase ..... Single-Phase
Power Supply Circuit ..... 15 Amps
Plug/Receptacle ..... NEMA 5-15

Grounding & Plug Requirements

The auxiliary power connection MUST be grounded. In the event of certain malfunctions or breakdowns, grounding reduces the risk of electric shock by providing a path of least resistance for electric current.

The work light and 120V outlet is equipped with a power cord that has an equipment-grounding wire and a grounding plug. Only insert plug into a matching receptacle (outlet) that is properly installed and grounded in accordance with all local codes and ordinances. DO NOT modify the provided plug!

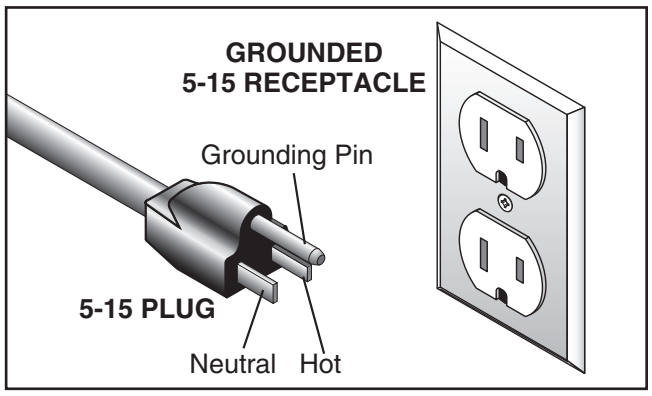
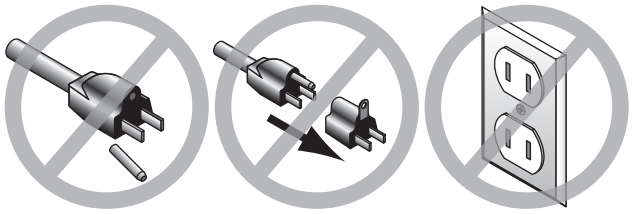


Figure 9. Typical 5-15 plug and receptacle.

⚠CAUTION



SHOCK HAZARD!
Two-prong outlets do not meet the grounding requirements for auxiliary power connection. Do not modify or use an adapter on the plug provided—if it will not fit the outlet, have a qualified electrician install the proper outlet with a verified ground.

Improper connection of the equipment-grounding wire can result in a risk of electric shock. The wire with green insulation (with or without yellow stripes) is the equipment-grounding wire. If repair or replacement of the power cord or plug is necessary, do not connect the equipment-grounding wire to a live (current carrying) terminal.

Check with a qualified electrician or service personnel if you do not understand these grounding requirements, or if you are in doubt about whether the auxiliary connection is properly grounded. If you ever notice that a cord or plug is damaged or worn, disconnect it from power, and immediately replace it with a new one.

Extension Cords

We do not recommend using an extension cord with the auxiliary power cord. If you must use an extension cord, only use it if absolutely necessary and only on a temporary basis.

Extension cords cause voltage drop, which can damage electrical components and shorten motor life. Voltage drop increases as the extension cord size gets longer and the gauge size gets smaller (higher gauge numbers indicate smaller sizes).

Any extension cord used must be in good condition and contain a ground wire and matching plug/receptacle. Additionally, it must meet the following size requirements:

Minimum Gauge Size ..... 12 AWG
Maximum Length (Shorter is Better)..... 50 ft.

Converting Main Power Supply Voltage to 460V

The voltage conversion MUST be performed by an electrician or qualified personnel.

To perform the voltage conversion, rewire the motor and replace the magnetic switch.

IMPORTANT: *If the diagram included on the motor conflicts with the one in this manual, the motor may have changed since the manual was printed. Use the diagram provided on the motor.*

Items Needed	**Qty**
Phillips Head Screwdriver #2	1
Wrench or Socket 8mm	1
Open-End Wrenches 24mm	2
Magnetic Switch 460V (#P0965058X)	1

To convert main power supply to 460V:

1. DISCONNECT MACHINE FROM POWER AND AIR!

2. Remove (12) knob bolts and fender washers shown in **Figure 10** to remove filter cage and gain access to motor.

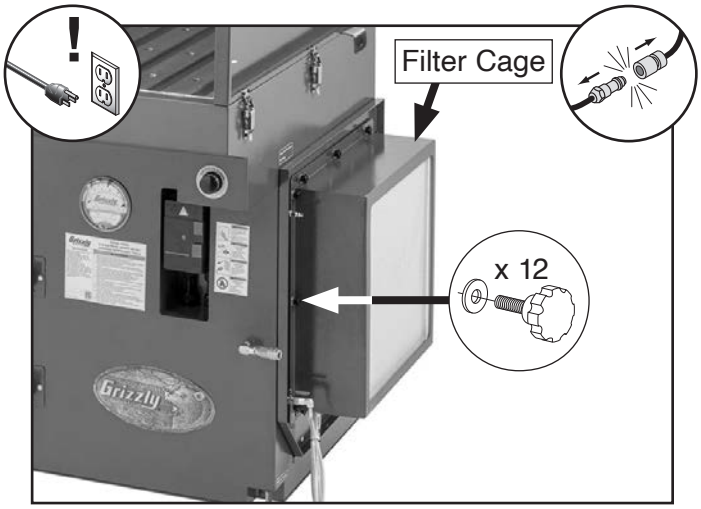


Figure 10. Location of filter cage and fasteners.

3. Remove screw shown in **Figure 11** to remove motor junction box cover.

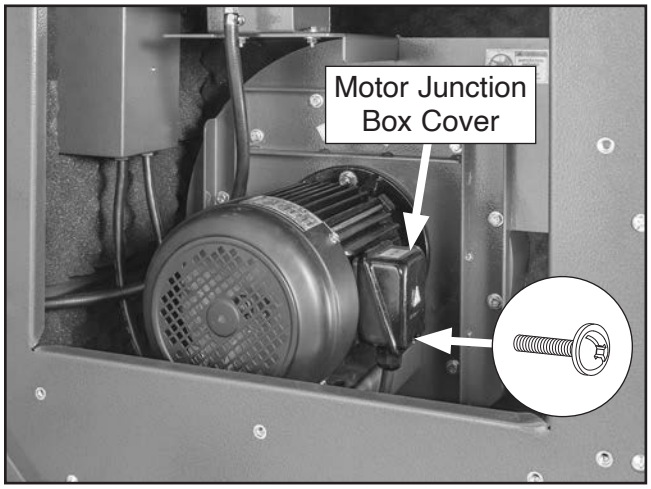


Figure 11. Motor junction box cover and screw.

4. Remove (2) jumpers, and wires 7, 8, and 9 from terminals (see **Figure 12**). Jumpers will not be reused.

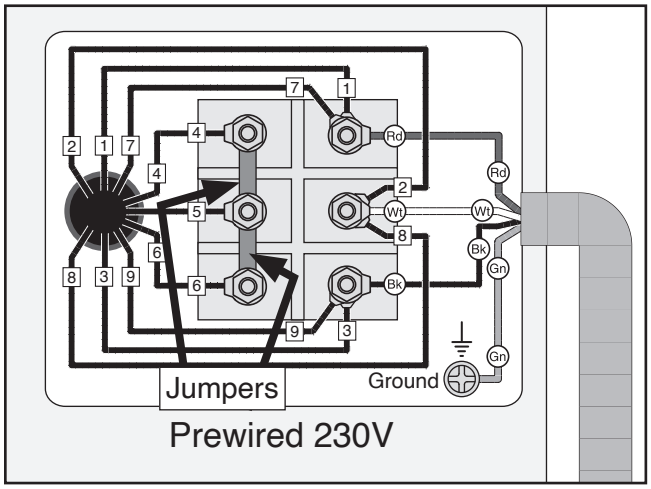


Figure 12. Motor prewired for 230V.

5. Connect wires 7, 8, and 9 according to wiring diagram on **Page 48**.

6. Close and secure motor junction box cover.

7. Install HEPA filter with knob bolts removed in **Step 2**.

   Note: *If drain valve handle is open, it may interfere with this step.*

8. Fully loosen (2) screws shown in **Figure 13** to remove magnetic switch cover.

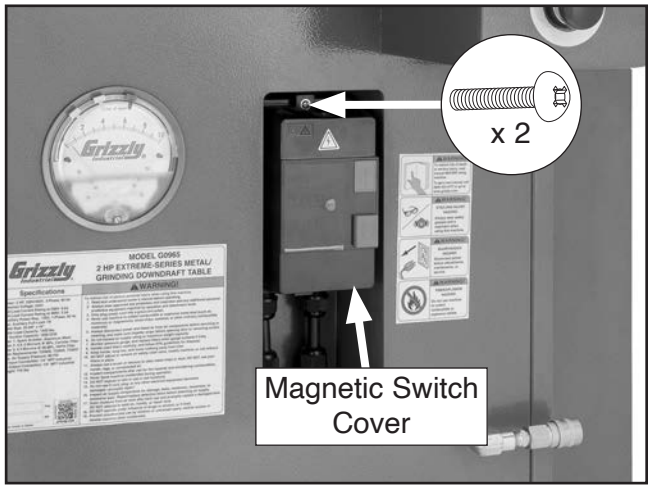


Figure 13. Magnetic switch cover and screws.

9. Disconnect wires coming from power cord and motor cord from contactor, overload relay, and ground terminals inside 230V magnetic switch box (see **Figure 14**).

10. Loosen (2) strain relief nuts shown in **Figure 14** to remove motor and power cords from strain relief holes.

11. Remove (2) screws shown in **Figure 14** to remove 240V magnetic switch box from machine.

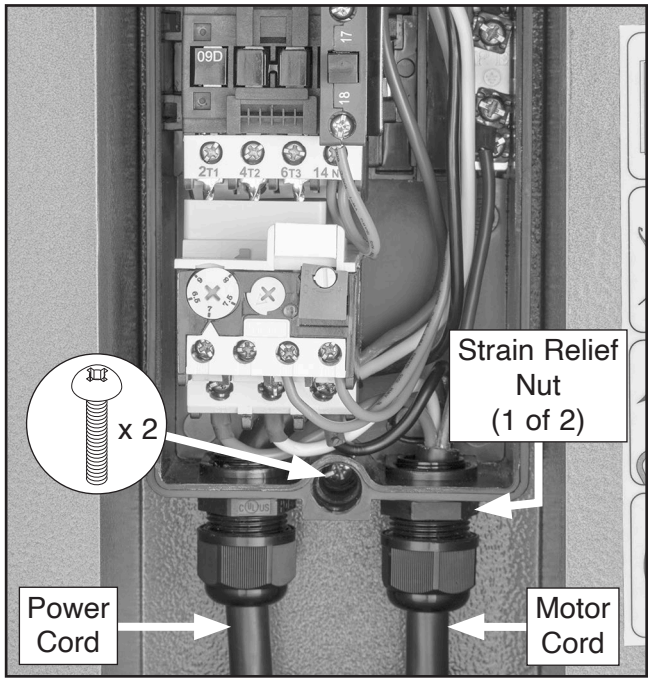


Figure 14. Location of magnetic switch box components.

12. Remove cover on 460V magnetic switch box, and install box on machine with screws removed in **Step 11**.

13. Insert motor cord through 460V magnetic switch box strain relief hole, then attach wires to terminals according to wiring diagram on **Page 48**.

14. Prepare hardwire power source according to **460V Circuit Requirements** and **460V Connection Type** on **Page 15**.

15. LOCK DISCONNECT SWITCH BOX IN OFF POSITION!

16. Insert incoming power conduit through open strain relief in 460V magnetic switch box.

17. Attach incoming power wires to contactor and ground terminals according to wiring diagram on **Page 48**.

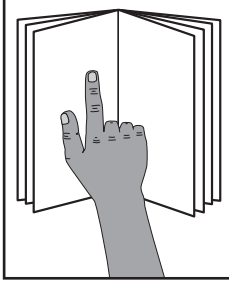
    — Make sure wires have enough slack inside magnetic switch so they are not pulled tight or stretched.

18. Install 460V magnetic switch cover and tighten strain relief nuts.

⚠WARNING

Serious injury could occur if you connect machine to power before completing setup process. DO NOT connect to power until instructed later in this manual.

SECTION 3: SETUP

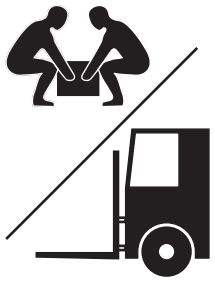


⚠WARNING

This machine presents serious injury hazards to untrained users. Read through this entire manual to become familiar with the controls and operations before starting the machine!

⚠WARNING

Wear safety glasses during the entire setup process!



⚠WARNING

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

⚠CAUTION

No list of safety guidelines can be complete. Every shop environment is different. Always consider safety first, as it applies to your individual working conditions. Use this and other machinery with caution and respect. Failure to do so could result in serious personal injury, damage to equipment, or poor work results.

Needed for Setup

The following items are needed, but not included, for the setup/assembly of this machine.

Description	Qty
• Safety Glasses (for each person)	1
• Lifting Equipment (Rated for at least 1300 lbs.)	1
• Open-End Wrenches 24mm	2
• NEMA Plug 15-20 (for 230V Operation)	1
• Phillips Head Screwdriver #2	1
• Air Compressor (90 PSI)	1
• Air Hose	1
• Industrial Quick-Connect Coupler ¼"	1

Unpacking

This machine was carefully packaged for safe transport. When unpacking, separate all enclosed items from packaging materials and inspect them for shipping damage. ***If items are damaged, please call us immediately at (570) 546-9663.***

IMPORTANT: Save all packaging materials until you are completely satisfied with the machine and have resolved any issues between Grizzly or the shipping agent. *You MUST have the original packaging to file a freight claim. It is also extremely helpful if you need to return your machine later.*

Inventory

The following is a list of items shipped with your machine. Before beginning setup, lay these items out and inventory them.

If any non-proprietary parts are missing (e.g. a nut or a washer), we will gladly replace them; or for the sake of expediency, replacements can be obtained at your local hardware store.

NOTICE

If you cannot find an item on this list, carefully check around/inside the machine and packaging materials. Often, these items get lost in packaging materials while unpacking or they are pre-installed at the factory.

Main Inventory (Figure 15) **Qty**

A. Downdraft Table 1

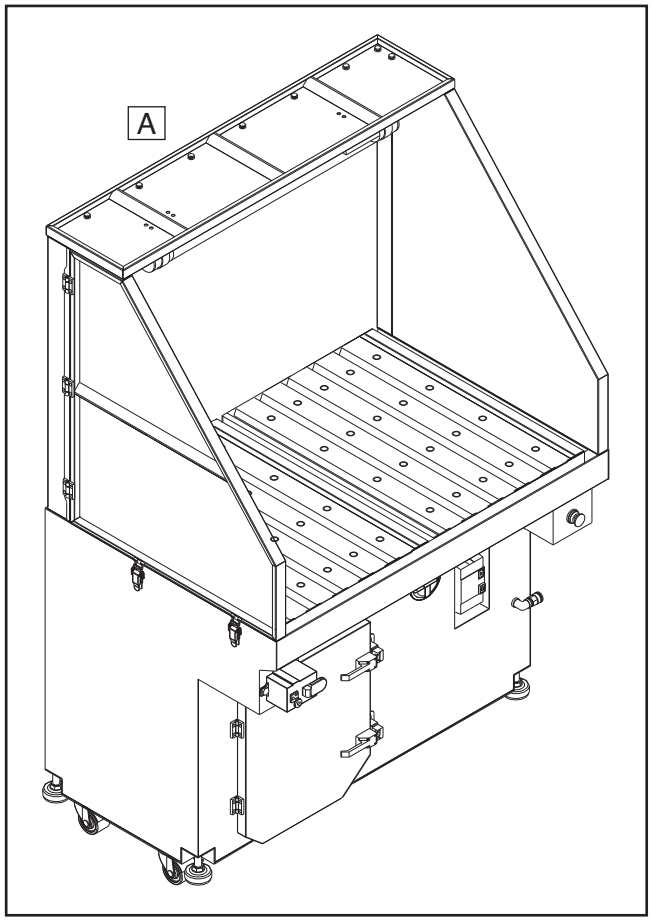


Figure 15. Main inventory.

Loose Items (Figure 16) **Qty**

B. HEPA Filter 1

C. Filter Cage 1

D. Knob Bolts ¼"-20 x ¾" 12

E. Fender Washers ¼" 12

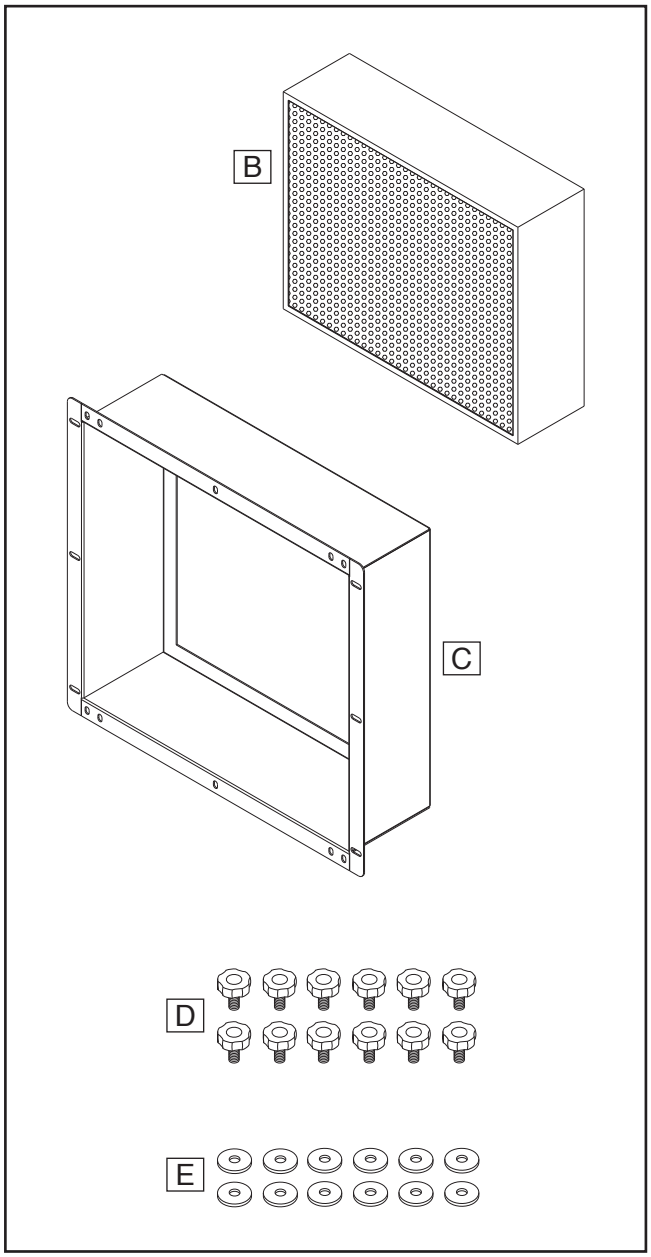


Figure 16. Loose items.

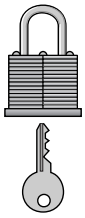
Site Considerations

Weight Load

Refer to the **Machine Data Sheet** for the weight of your machine. Make sure that the surface upon which the machine is placed will bear the weight of the machine, additional equipment that may be installed on the machine, and the heaviest workpiece that will be used. Additionally, consider the weight of the operator and any dynamic loading that may occur when operating the machine.

Space Allocation

Consider the largest size of workpiece that will be processed through this machine and provide enough space around the machine for adequate operator material handling or the installation of auxiliary equipment. With permanent installations, leave enough space around the machine to open or remove doors/covers as required by the maintenance and service described in this manual. **See below for required space allocation.**



⚠CAUTION

Children or untrained people may be seriously injured by this machine. Only install in an access restricted location.

Physical Environment

The physical environment where the machine is operated is important for safe operation and longevity of machine components. For best results, operate this machine in a dry environment that is free from excessive moisture, hazardous chemicals, airborne abrasives, or extreme conditions. Extreme conditions for this type of machinery are generally those where the ambient temperature range exceeds 41°–104°F; the relative humidity range exceeds 20%–95% (non-condensing); or the environment is subject to vibration, shocks, or bumps.

Electrical Installation

Place this machine near an existing power source. Make sure all power cords are protected from traffic, material handling, moisture, chemicals, or other hazards. Make sure to leave enough space around machine to disconnect power supply or apply a lockout/tagout device, if required.

Lighting

Lighting around the machine must be adequate enough that operations can be performed safely. Shadows, glare, or strobe effects that may distract or impede the operator must be eliminated.

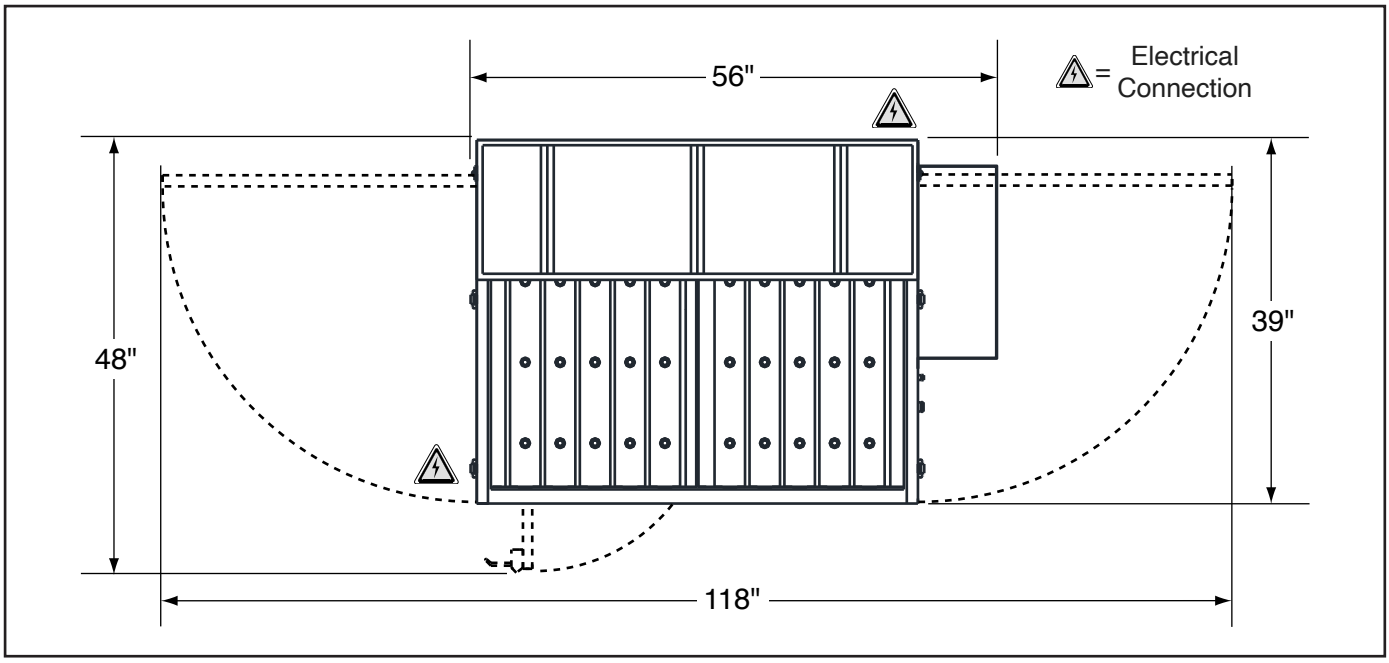


Figure 17. Minimum working clearances.

Lifting & Placing

⚠WARNING

HEAVY LIFT!

Straining or crushing injury may occur from improperly lifting machine or some of its parts. To reduce this risk, get help from other people and use a forklift (or other lifting equipment) rated for weight of this machine.

Before lifting the machine, refer to **Needed for Setup** and gather all listed items. Use a forklift to lift the machine off the pallet.

To lift and place machine:

1. Remove top and sides of crate from shipping pallet, then remove any small components and packing materials from pallet.

2. Move pallet and machine to prepared location.

3. Carefully place forklift forks under machine (see **Figure 18**).

Figure 18. Lifting locations.

4. Lift machine just enough to clear pallet, then remove pallet.

5. Lower machine to ground.

6. Move machine to desired location, then adjust feet out of machine base until casters no longer touch floor (see **Figure 19**), then adjust them until machine is level.

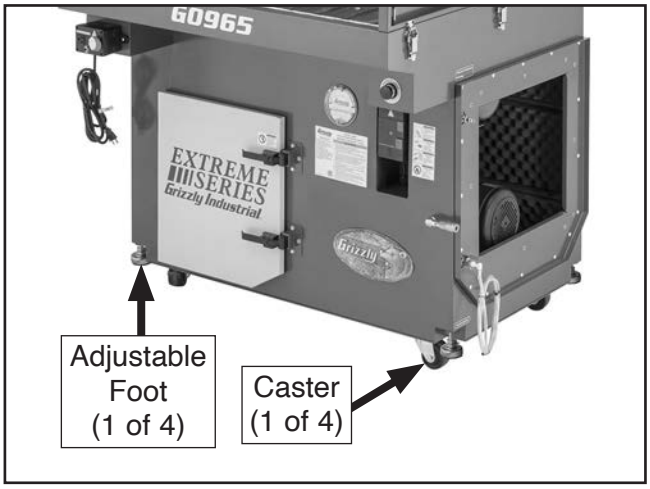


Figure 19. Location of adjustable feet and casters.

7. Without moving feet, adjust hex nuts on feet against machine base to secure.

Assembly

Before assembling the Model G0965, complete **Steps 1–14** of **Test Run** on **Page 24**. The HEPA filter cannot be installed until the power supply polarity and safety relief valve have been tested. Once you have confirmed that these are working correctly, fully assemble the machine with the steps below before proceeding with **Steps 16–20** of the **Test Run**.

NOTICE

Do not perform the below assembly steps until Steps 1–14 of Test Run have been completed.

To assemble machine:

1. Place HEPA filter in filter cage so air flow direction arrow points into cage (see **Figure 20**).

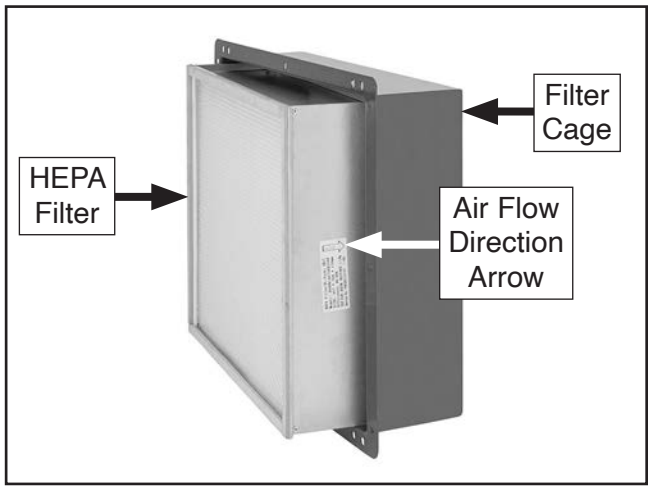


Figure 20. Placing HEPA filter in filter cage.

2. Attach filter cage to machine with (12) ¼"-20 x ¾" knob bolts and ¼" fender washers (see **Figure 21**).

   Note: *If drain valve handle is open, it may interfere with this step.*

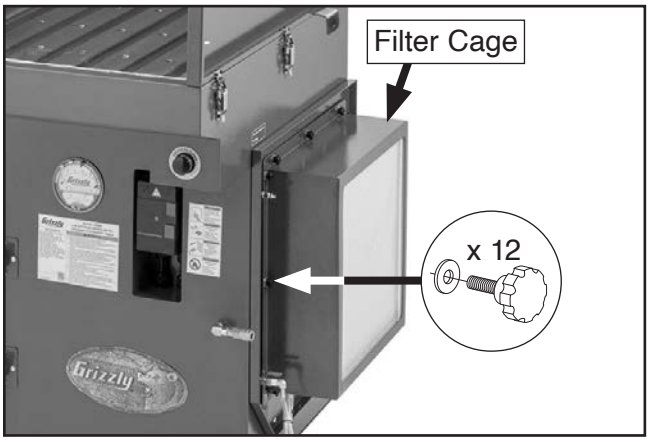


Figure 21. Filter cage attached to machine.

Power Connection

Before the machine can be connected to the power source, an electrical circuit and connection device must be prepared per the **POWER SUPPLY** section in this manual, and all previous setup instructions in this manual must be complete to ensure that the machine has been assembled and installed properly.

NOTICE

The Model G0965 is prewired for 230V. If you plan to operate machine at 460V, motor must be rewired, magnetic switch must be replaced, and machine must be connected to a hardwired disconnect switch. Use instructions beginning on Page 17 before referring to 460V Power Connection section.

230V Power Connection

To connect the machine to power for 230V operation, install a 15-20 plug on the end of the power cord per the plug manufacturer's instructions. If no instructions were included, use the wiring diagram on **Page 46**.

Insert power cord plug into a matching power supply receptacle. The machine is now connected to the power source.

If you need to disconnect the machine from power later, pull the plug completely out of the receptacle.

460V Power Connection

Once the 460V voltage conversion beginning on **Page 17** has been completed, refer to the following instructions to connect the machine to power.

To connect the machine to power for 460V operation, move the disconnect switch handle to the ON position, as illustrated below. The machine is now connected to the power source.

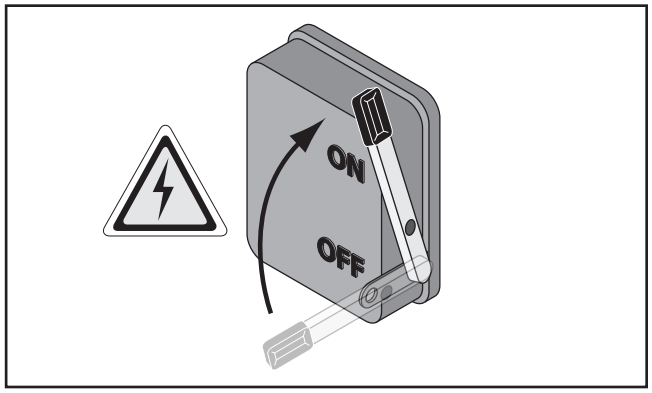


Figure 22. Connecting power to machine.

To disconnect the machine from the power source, move the disconnect switch handle to the OFF position, as illustrated below. The machine is now disconnected from the power source.

Note: *Lock the switch in the OFF position to restrict others from starting the machine.*

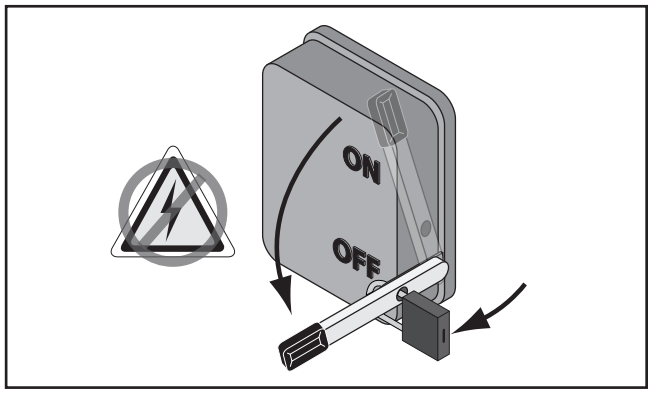


Figure 23. Disconnecting power from machine.

Test Run

Once assembly is complete, test run the machine to ensure it is properly connected to power and safety components are functioning correctly.

If you find an unusual problem during the test run, immediately stop the machine, disconnect it from power, and fix the problem BEFORE operating the machine again. The **Troubleshooting** table in the **SERVICE** section of this manual can help.

The Test Run consists of verifying the following: 1) The power supply polarity is correct, 2) the motor powers up and runs correctly, 3) the controls work correctly, 4) the work light turns ***ON*** and ***OFF***, and 5) the switch disabling key disables the auxiliary power properly.

⚠WARNING

Serious injury or death can result from using this machine BEFORE understanding its controls and related safety information. DO NOT operate, or allow others to operate, machine until the information is understood.

⚠WARNING

DO NOT start machine until all preceding setup instructions have been performed. Operating an improperly set up machine may result in malfunction or unexpected results that can lead to serious injury, death, or machine/property damage.

To test run machine:

1. Clear all setup tools away from machine.

2. Connect machine to power (refer to **Power Connection** on **Page 23**).

   Note: *Do not connect auxiliary power cord to power until instructed later in **Test Run**.*

3. Press ON button to start machine (see **Figure 24**).

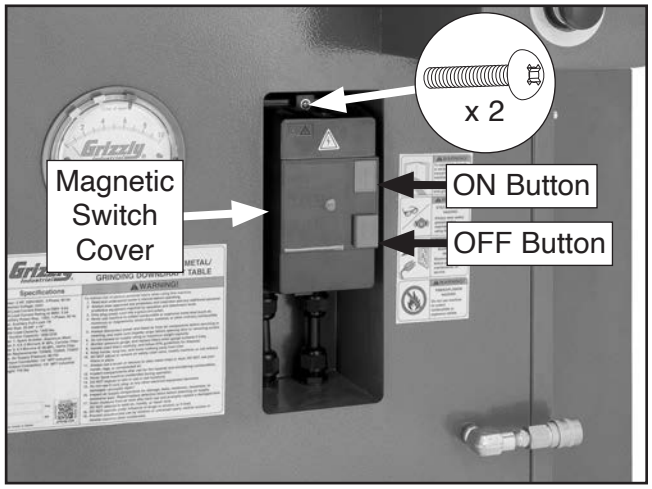


Figure 24. Location of magnetic switch components.

4. Observe motor fan through motor cover (see **Figure 25**).

   — If motor fan rotates counterclockwise, power supply polarity is correct. Proceed to **Step 10**.

   — If motor fan rotates clockwise, stop machine. Phase polarity of incoming power is reversed and needs to be corrected. Proceed to **Step 5**.

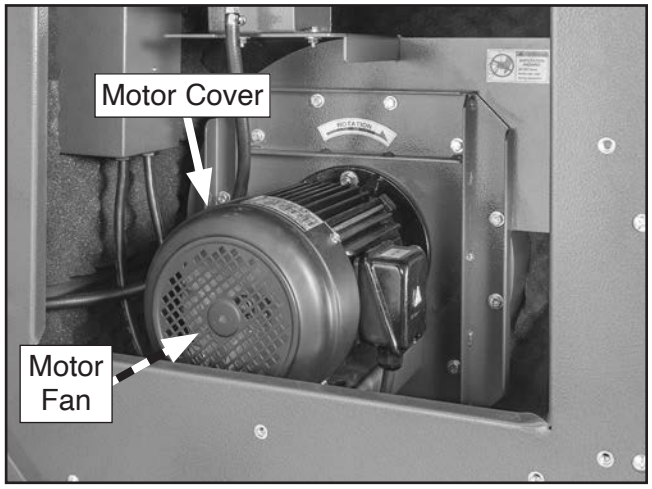


Figure 25. Location of motor fan and cover.

5. DISCONNECT MACHINE FROM POWER!

6. Fully loosen (2) screws shown in **Figure 24** to remove magnetic switch cover.

7. Swap power supply wires connected to "1L1" and "3L2" terminals on contactor (see **Figure 26**).

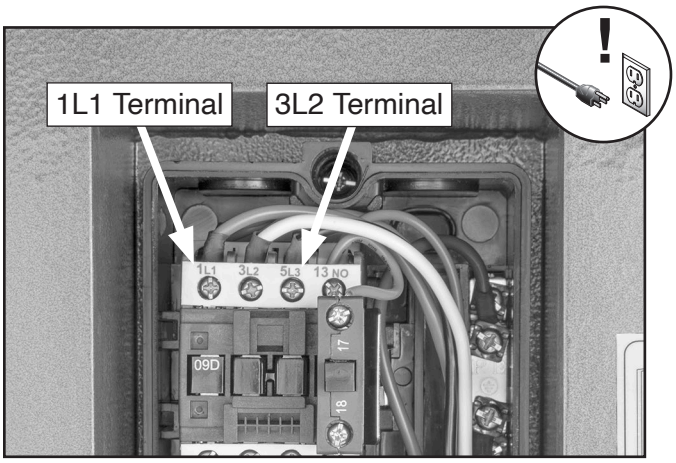


Figure 26. Location of "1L1" and "3L2" contactor terminals.

8. Install magnetic switch cover.

9. Connect machine to power, press ON button, and repeat **Step 4**.

10. Allow machine to run for a few minutes. Verify motor runs smoothly without any unusual problems or noises.

11. Press OFF button to turn machine ***OFF*** (see **Figure 24**).

12. Refer to **Compressed Air Supply** on **Page 29** to connect air supply to machine.

13. Press AIR PULSE CLEAN button (see **Figure 27**). You should hear a loud thud if canister cleaning function is working correctly.

Figure 27. Location of AIR PULSE CLEAN button.

⚠CAUTION

Releasing air through safety relief valve can be extremely loud. Protect hearing with ANSI-approved hearing protection in following step.

14. Slowly pull safety relief valve ring for a few seconds to bleed air from downdraft table air tank (see **Figure 28**).

Figure 28. Location of safety relief valve.

— If safety relief valve bleeds air from tank, and air stops leaking when you release ring, then safety feature of safety relief valve is working correctly. Proceed to **Step 15**.

— If safety relief valve is stuck or leaks after ring is released, immediately disconnect air supply as described in **Compressed Air Supply** on **Page 29**. Safety relief valve must be replaced before further using downdraft table pneumatic components.

15. DISCONNECT MACHINE FROM POWER! Proceed to **Assembly** on **Page 23** to install HEPA filter, then return here to perform remaining **Test Run** steps.

16. Connect auxiliary power cord to power.

17. Move auxiliary power ON/OFF switch left to turn auxiliary power ***ON*** (see **Figure 29**). Work light will illuminate.

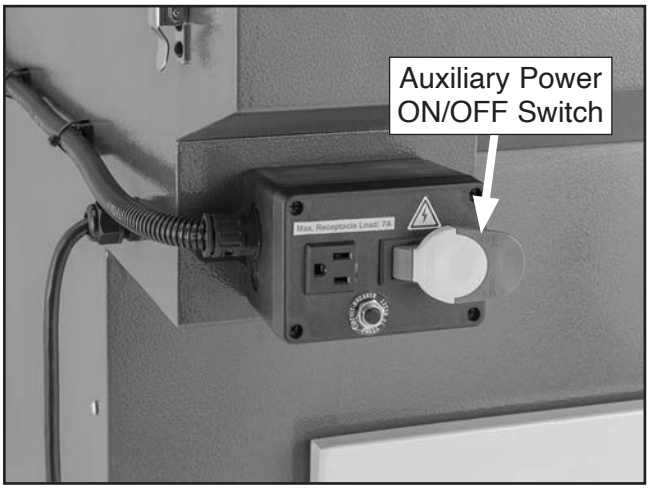


Figure 29. Location of auxiliary power ON/OFF switch.

18. Move auxiliary power ON/OFF switch right to turn auxiliary power ***OFF***.

19. Remove switch disabling key, as shown in **Figure 30**.

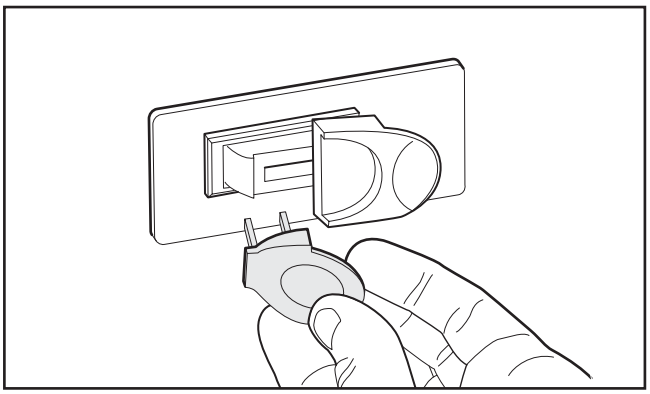


Figure 30. Removing switch key from paddle switch.

20. Try to turn on work light with auxiliary power ON/OFF switch. Work light should not turn ***ON***.

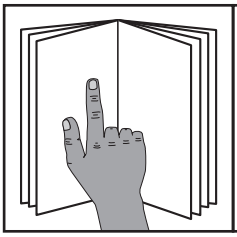
— If work light *does not* turn ***ON***, switch disabling feature is working correctly. Congratulations! Test Run is complete.

— If work light *does* turn ***ON***, immediately turn ***OFF*** auxiliary power. Switch disabling feature is not working correctly. This safety feature must work properly before using auxiliary power. Call Tech Support for help.

SECTION 4: OPERATIONS

⚠DANGER

Always wear welding personal protective equipment, including hood, respirator, gloves, boots, and long sleeves when welding.



⚠WARNING

To reduce your risk of serious injury, read this entire manual BEFORE using machine.

⚠WARNING

Wear approved respirator, safety goggles, and protective gloves whenever cleaning machine or handling filters to reduce risk of eye, face, and lung injuries

⚠WARNING

Never operate machine with damaged or worn parts. Never operate machine with filters removed, or filter door open.

NOTICE

If you are not experienced with this type of machine, WE STRONGLY RECOMMEND that you seek additional training outside of this manual. Read books/magazines or get formal training before beginning any projects. Regardless of the content in this section, Grizzly Industrial will not be held liable for accidents caused by lack of training.

Operation

This downdraft table features a work light to illuminate the work area, and an impeller that draws fumes and dust from the table into a three-stage filter system. The side doors can be latched in place or opened to make room for larger workpieces.

Electric or pneumatic grinders (or other hand-held tools) can be attached directly to the machine with the auxiliary outlet and quick-connect coupler, eliminating the need for extension cords or long air hoses that get in the way.

The pneumatic cleaning system knocks dust off of the two canister filters where a dust tray waits to collect it. Both this tray and a drawer under the spark arrestor can be easily removed for dust and slag disposal.

This machine does not substitute the need for a respirator or proper workpiece preparation.

When welding or plasma cutting, make sure you are familiar with the workpiece materials, know what types of fumes will be created, and take the necessary precautions. Many metal coatings will produce poisonous fumes when heated. Strip coatings off at least four inches away from the area of heat application before welding or cutting. It is always better to follow good welding practices and remove coatings that may smoke and possible contaminate the weld.

To operate downdraft table:

1. Put on personal protective equipment required by operation.

2. Place workpiece on table. Unlatch side doors if workpiece extends beyond table surface.

3. Attach hand-held electric tool to auxiliary power outlet or air tool to quick-connect coupler.

4. Turn downdraft table and compressed air supply ***ON***.

5. Turn ***ON*** work light and auxiliary outlet power if needed for operation.

6. Perform operation.

7. Turn downdraft table and auxiliary power ***OFF*** when operation is finished.

8. Use air pulse system to clean canister filters.

9. Allow downdraft table to run for a few minutes to collect residual fumes from environment.

10. DISCONNECT MACHINE FROM AIR AND POWER!

11. Open drain valve to drain any condensation from air tank and components.

12. Close drain valve.

13. While wearing safety goggles, protective gloves, and NIOSH-approved respirator rated for waste metal type, empty dust drawer and tray.

14. Inspect compartments for fire hazards and smoldering combustibles before leaving downdraft table unattended.

Opening Side Doors

Open one or both of the side doors in order to accommodate larger workpieces. Close the doors, when possible, to better direct sparks, fumes, and dust into filter compartments of the table.

Opening Side Door

1. Unlatch (2) side door latches (see **Figure 31**).

2. Lift spring plunger out of table in order to swing door out (see **Figure 31**).

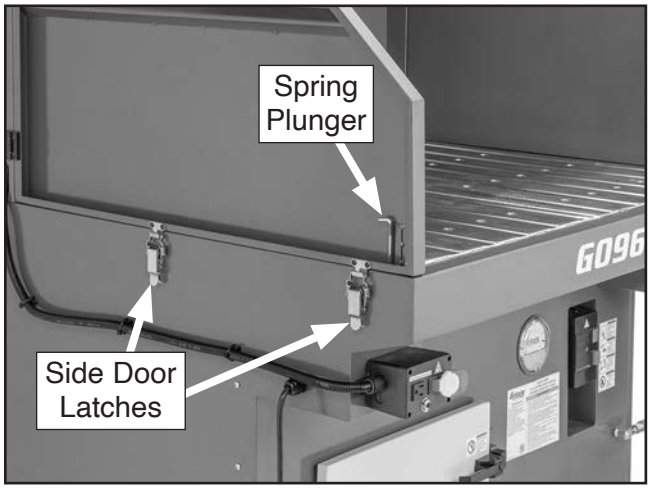


Figure 31. Location of side door components.

Closing Side Door

1. Lift spring plunger, swing door closed, then lower plunger into table (see **Figure 31**).

2. Latch (2) side door latches to secure (see **Figure 31**).

Compressed Air Supply

The Model G0965 features a quick-connect plug for attaching a compressed air supply. When the compressed air is connected, the AIR PULSE CLEAN button can be used to pneumatically clean the canister filters. This table also has a coupler for attaching an air tool to the same air supply. For constant use of these features, keep the air supply connected unless you need to switch air tools, or perform maintenance or service.

When attaching an air supply, use only clean, dry compressed air. For best results, use an in-line air regulator and filter setup similar to the one shown in **Figure 32**. An in-line regulator will allow you to adjust the pressure of the air supply down to the required operating pressure of 90 PSI.

⚠WARNING

Air escaping through fittings can project debris into eyes and is extremely loud. Wear safety glasses and hearing protection when handling pressurized air system.

Both the air input and air output connections are industrial-style quick-connect fittings with a ¼" coupling size. This means the air inlet plug has a plug tip diameter of 5/16" and a plug tip length of 3/16" (see **Figure 33**). The coupler you attach to this plug must also be industrial-style (or universal) and have a coupling size of ¼" for the plug to fully seat in it.

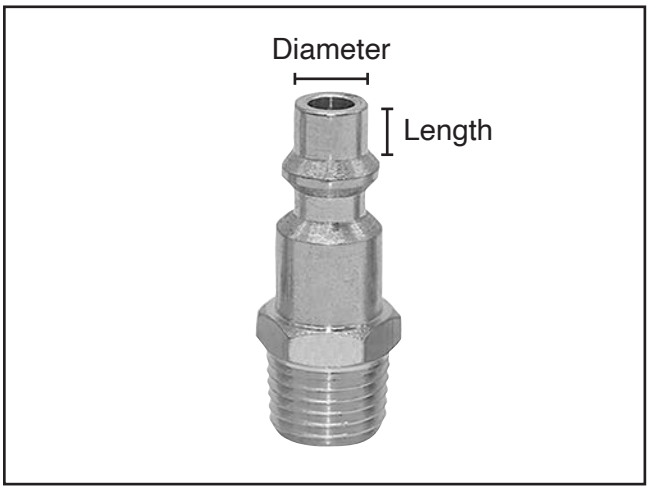


Figure 33. Measuring industrial-style plug coupling size.

The downdraft table coupler will require you to attach an air tool with a hose fitted with the same size of industrial-style plug with a hose diameter and thread size of your choosing.

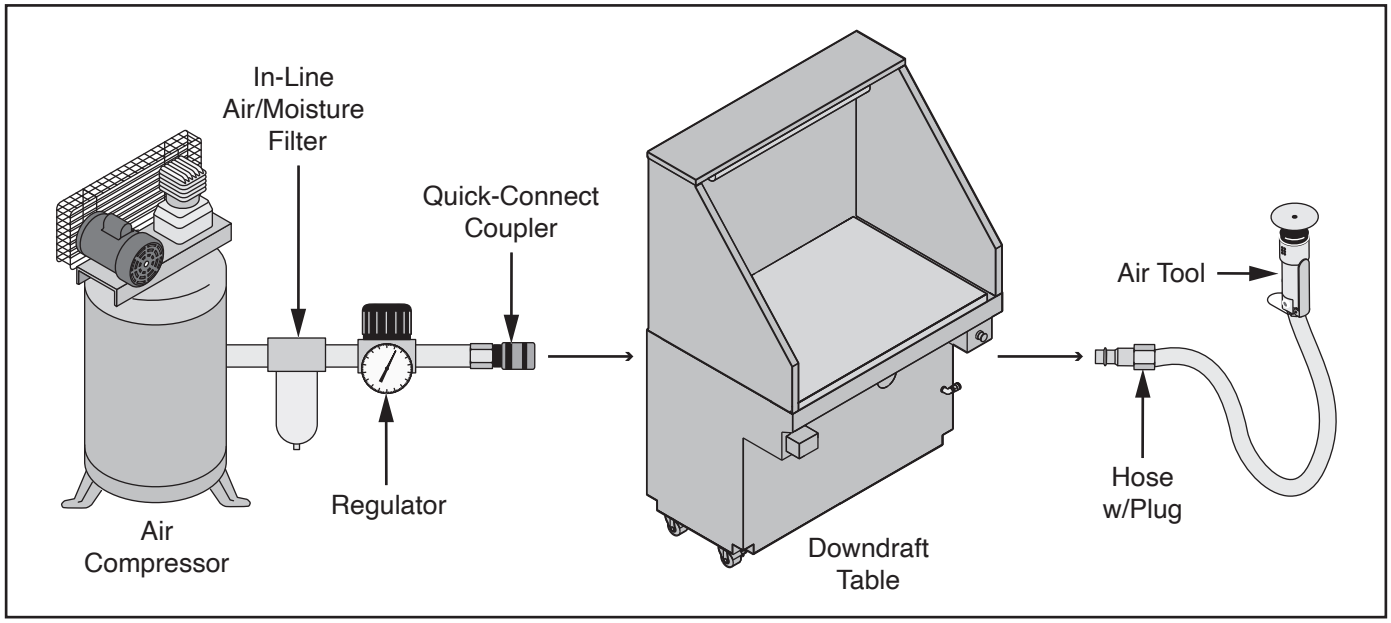


Figure 32. Typical compressed air supply setup for downdraft table and optional air tool.

Connecting Air Supply

1. Adjust air supply regulator to 0 PSI.

2. Push back sleeve on air supply quick-connect coupler (see **Figure 34**).

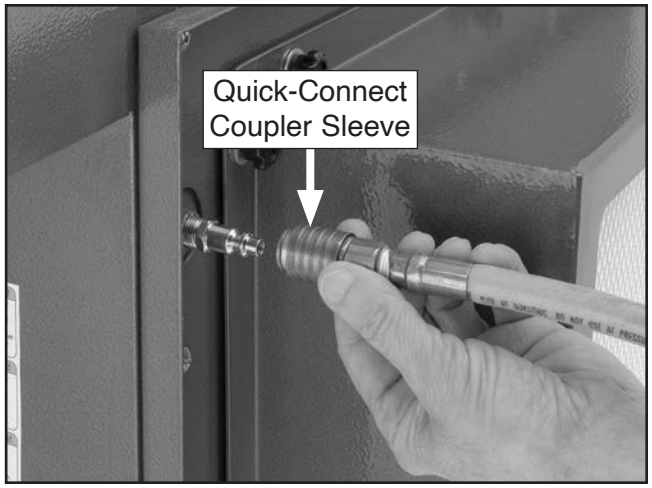


Figure 34. Air supply quick-connect coupler sleeve pushed back.

3. With sleeve pushed back, push coupler onto downdraft table air inlet plug, then release coupler sleeve to lock it in place (see **Figure 35**).

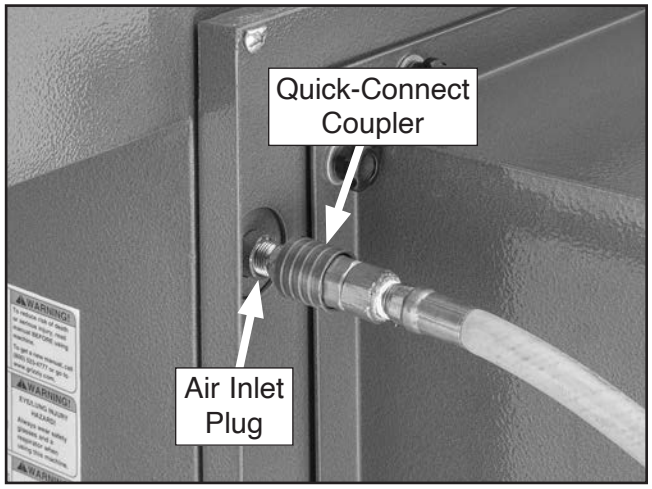


Figure 35. Quick-connect coupler attached to air inlet plug.

4. Adjust air supply regulator to 90 PSI.

Disconnecting Air Supply

1. Turn downdraft table ***OFF***.

2. Adjust air supply regulator to 0 PSI.

3. Press AIR PULSE CLEAN button a couple of times to bleed air from downdraft table air tank and components (see **Figure 36**).

Figure 36. Location of AIR PULSE CLEAN button.

4. Push air supply quick-connect coupler sleeve away from downdraft table to release plug and remove coupler (see **Figure 37**).

   Note: *Air will escape when connection is broken if components are still pressurized.*

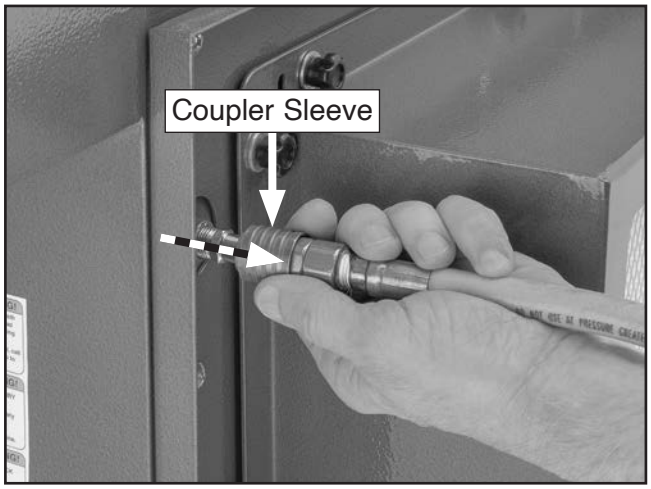


Figure 37. Pushing coupler sleeve to release plug.

Air Pulse Cleaning Canister Filters

In order to use the air pulse cleaning feature, the machine must be connected to a compressed air supply. Refer to **Connecting Air Supply** on **Page 30** before performing the steps below.

To air pulse clean canister filters:

1. Turn downdraft table ***ON*** and observe pressure gauge to note current operating pressure (see **Figure 38**).

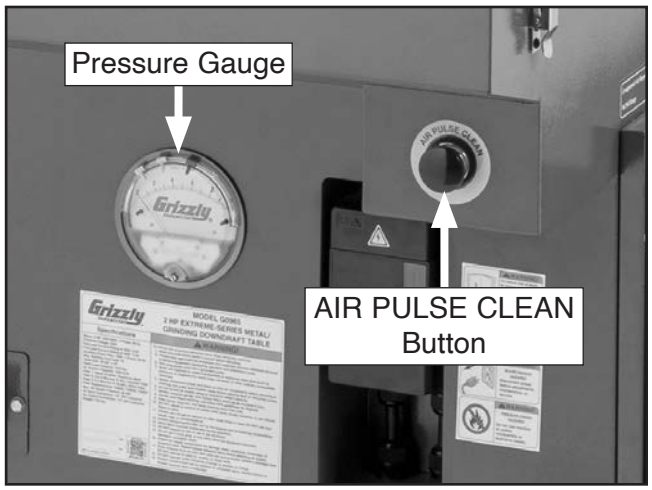


Figure 38. Location of pressure gauge and AIR PULSE CLEAN button.

2. Turn downdraft table ***OFF***.

3. Press and release AIR PULSE CLEAN button to pulse air at filters (see **Figure 38**).

4. Wait a couple of seconds to allow tank to refill with air, then repeat **Step 3**.

5. Turn downdraft table ***ON*** to observe operating pressure at pressure gauge.

   — If operating pressure has decreased and is below 6 inAq, no further steps are required.

   — If operating pressure has not decreased, or it exceeds 6 inAq, refer to **Cleaning/ Replacing Canister Filters** on **Page 37** to remove and clean filters.

Connecting Air Tool

Use the following steps as a guide for attaching an air tool. As there are a wide variety of tool and hose options, your connections may differ slightly from this simple outline.

Items Needed	Qty
Air Tool (Rated for 90 PSI)	1
Air Hose	1
Industrial Quick-Connect Plug ¼"	1

⚠WARNING

Always wear personal protective equipment required by air tool you are using. Pneumatic grinders, sanders, plasma cutters, etc., require eye protection and respirator to protect against long-term eye and lung damage. Prolonged exposure to loud tools can result in hearing loss without the use of hearing protection.

⚠WARNING

Confirm air tool trigger or other starting controls are not activated while connecting air tool. Accidental firing can injure operator or bystanders.

To connect air tool:

1. Push back sleeve on downdraft table quick-connect coupler, insert air hose plug into coupler, then release coupler sleeve to lock it in place (see **Figure 39**).

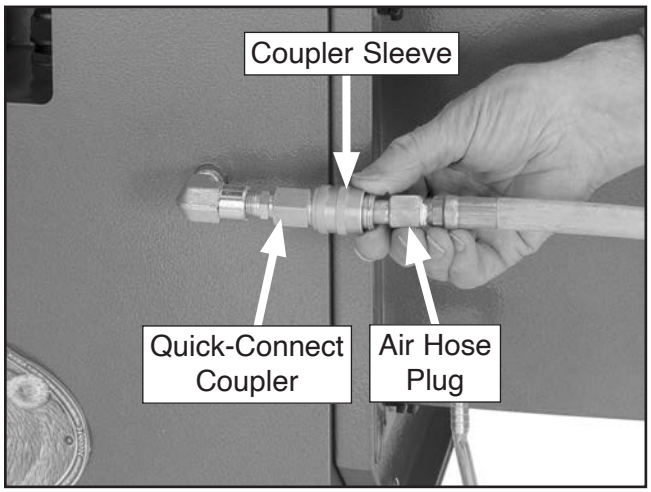


Figure 39. Inserting plug into coupler.

2. Connect other end of hose to air tool.

   Note: *Refer to air tool instructions for specifications, method of connection, and proper use of tool.*

   IMPORTANT: Compressed air supply connected to Model G0965 must be adjusted to 90 PSI. Downdraft table air components are not rated for higher pressure and AIR PULSE CLEAN button will not function properly at a lower pressure. If air tool requires different operating pressure, you must use separate air supply.

Disconnecting Air Tool

1. Adjust air supply regulator to 0 PSI.

2. Press AIR PULSE CLEAN button a couple of times to bleed air from downdraft table air tank and components (see **Figure 40**).

Figure 40. Location of AIR PULSE CLEAN button.

3. Disconnect air tool from hose.

4. Push downdraft table coupler sleeve toward downdraft table to release air hose plug (see **Figure 41**).

   Note: *Air will escape when connection is broken if components are still pressurized.*

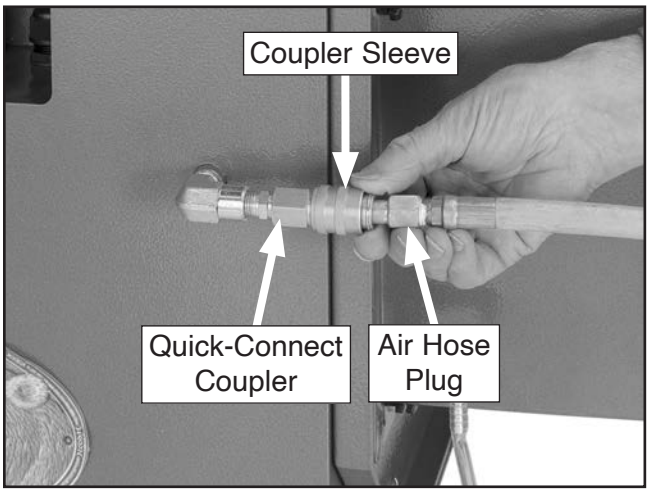


Figure 41. Pushing coupler sleeve to release plug.

SECTION 5: ACCESSORIES

⚠WARNING

Installing unapproved accessories may cause machine to malfunction, resulting in serious personal injury or machine damage. To reduce this risk, only install accessories recommended for this machine by Grizzly.

NOTICE

Refer to our website or latest catalog for additional recommended accessories.

Model G0965 Replacement Filters

T33835—Aluminum Mesh Filter for G0965

This mesh filter arrests sparks and stops larger pieces of metal from reaching the other filters. 630 x 285 x 22mm.

Figure 42. T33835 Aluminum Mesh Filter.

T33836—Canister Filter for G0965

The T33836 canister filter filters 95% of particles from 0.2–2 microns in size. Removing these particles helps the unit maintain airflow and increase filtration efficiency. This is especially vital to extending the life of the HEPA filter. 285 x 330mm.

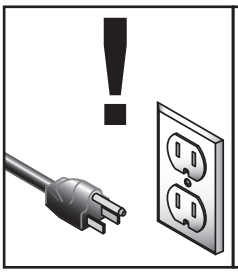
Figure 43. T33836 Canister Filter.

T33837—HEPA Filter for G0965

This HEPA filter filters 99.99% of particles 0.3 microns in size and has a 134.5 square foot surface area. 457 x 508 x 150mm.

Figure 44. T33837 HEPA Filter.

SECTION 6: MAINTENANCE



⚠WARNING

To reduce risk of shock or accidental startup, always disconnect machine from power before adjustments, maintenance, or service.

⚠WARNING

Eye injury hazard! Always wear safety glasses when maintaining pressurized air system.

Schedule

For optimum performance from this machine, this maintenance schedule must be strictly followed.

Ongoing
To minimize your risk of injury and maintain proper machine operation, shut down the machine immediately if you ever observe any of the items below, and fix the problem before continuing operations:

- Fire hazards or smoldering combustibles.
- Loose mounting bolts.
- Damaged filters, seals, valves.
- Worn or damaged wires.
- Any other unsafe condition.

Daily Maintenance
- Check operating pressure. If operating pressure exceeds 6 inAq, refer to **Cleaning/ Replacing Canister Filters** on **Page 37**.
- Empty dust tray and drawer.
- Open drain valve to drain any condensation.

Weekly Maintenance
- Clean/vacuum dust buildup from work area and outside of machine.

Monthly Maintenance
- Clean/vacuum dust buildup from inside machine and off motor.

Semi-Annual Maintenance
- Check compressed air connections inside motor compartment for leaks. If soapy water at suspected leak creates bubbles, air is escaping. Repair or replace affected parts.

Cleaning

Once a week, use a vacuum equipped with a HEPA filter to remove dust and fume buildup from the outside of the machine. Once a month, open the maintenance door and remove the filters to clean inside the machine. Wipe any remaining dust with a disposable cloth that has been wet with water. Wear protective gloves, ANSI-approved safety goggles, and a NIOSH-approved respirator when cleaning the machine to protect hands against sharp metal chips and protect against any airborne particles disturbed by cleaning.

IMPORTANT: DO NOT use compressed air to clean the machine—especially if indoors—as it will likely cause unnecessary dust to become airborne and can damage the filters.

⚠WARNING

Wear ANSI-approved safety goggles, NIOSH-approved respirator, and protective gloves when removing, cleaning, and replacing filters. Carefully minimize amount of dust allowed to become airborne, and prevent spread of dust onto hands or clothing. Dispose of all waste properly according to local regulations for material type.

⚠WARNING

DO NOT clean or degrease machine with any form of chlorinated hydrocarbons. When introduced to arc welding operations, chlorinated hydrocarbons produce phosgene gas which can result in serious injury and even death.

Draining Condensation

Some water may accumulate in the air tank and fittings depending on usage and humidity. Drain condensation from these components daily to increase their lifespan and to prevent tank corrosion.

To drain condensation:

1. DISCONNECT MACHINE FROM POWER AND AIR!

2. Place end of drain valve hose in bucket or other collection container.

3. Move drain valve handle to open drain valve and drain condensation (see **Figure 45**).

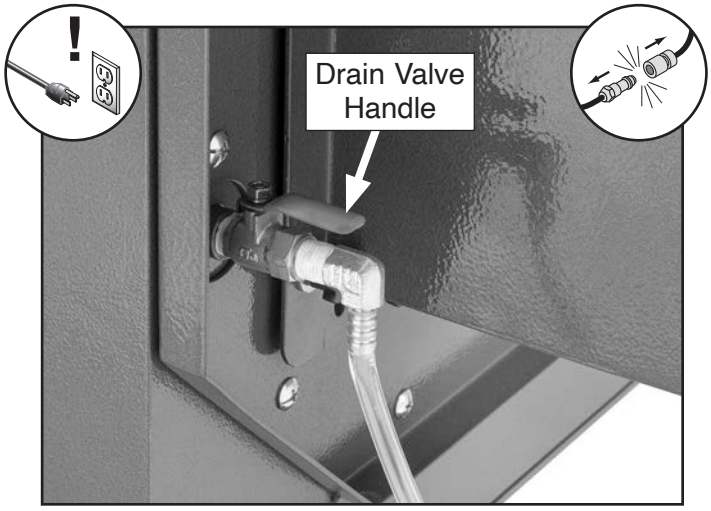


Figure 45. Drain valve handle open.

Emptying Dust Tray & Dust Drawer

Empty the dust tray and drawer at the end of the day's use. Do not store the dust near heat or anything likely to produce sparks, as some types of metal dust can be flammable.

If you are not disposing of the collected metal dust immediately, keep it in an approved, closed-top metal container stored away from fire hazards until you are ready to do so.

⚠WARNING

Wear safety goggles, respirator, and protective gloves rated for operational fumes and waste metal type when removing filters, tray, and drawer. Empty only into approved container, taking care to minimize amount of dust allowed to become airborne, and prevent spread onto hands and clothing.

Items Needed	Qty
ANSI-Approved Safety Goggles	1 Pr.
NIOSH-Approved Respirator	1
Protective Gloves	1 Pr.
Vacuum Cleaner w/HEPA Filter	1

To empty dust tray and drawer:

1. DISCONNECT MACHINE FROM POWER AND AIR!

⚠CAUTION

If you have just turned machine *OFF*, wait a few minutes for dust inside machine to settle before proceeding with following steps.

2. Put on personal protective equipment.

3. Pull (2) maintenance door handles to open maintenance door.

4. Loosen knob shown in **Figure 46**, then slide latch plate right.

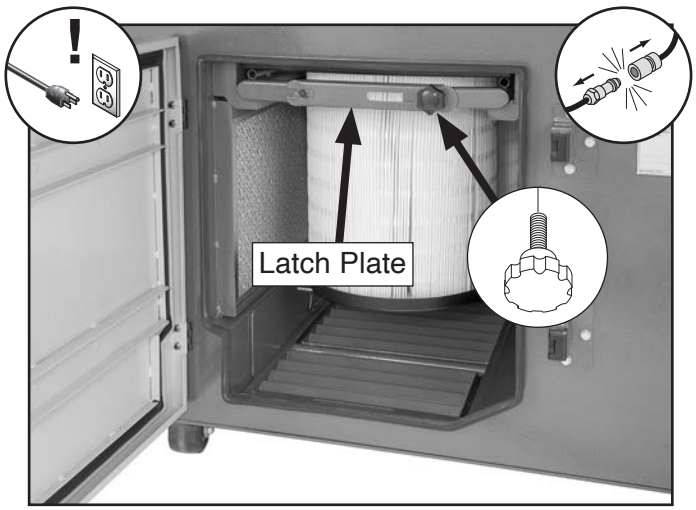


Figure 46. Location of filter retaining knob and latch plate.

5. Rotate pivot frames down, then slide canister filters out of machine (see **Figure 47**).

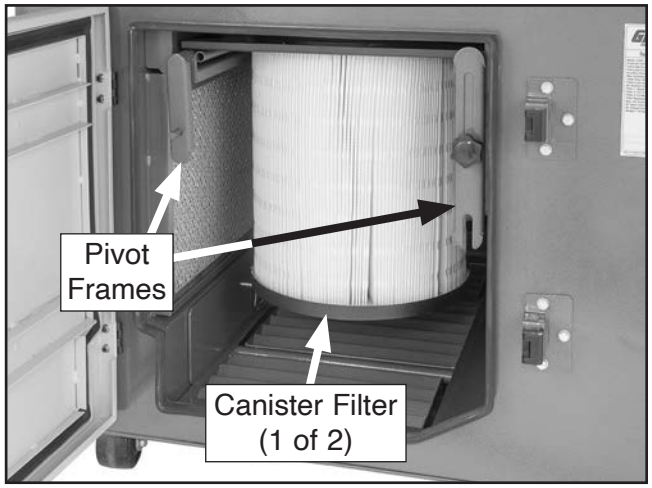


Figure 47. Pivot frames rotated down to release canister filters.

6. Pull dust drawer handle shown in **Figure 48** to remove drawer from under spark arrestor filter.

7. Lift and remove dust tray from machine (see **Figure 48**).

8. Remove (3) wave inserts from dust tray (see **Figure 48**).

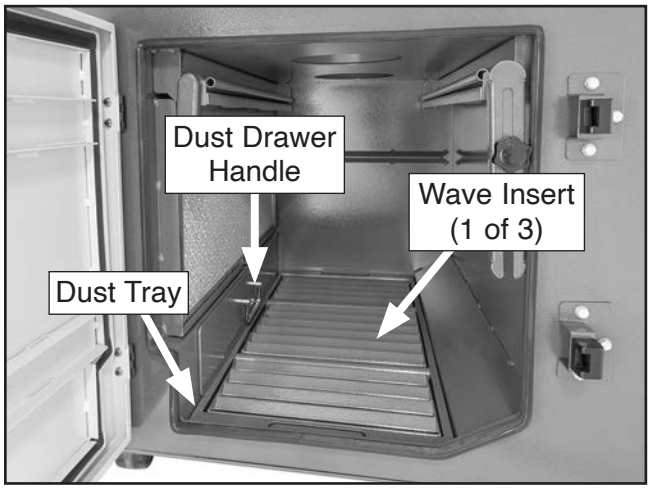


Figure 48. Location of dust collection components.

9. Vacuum accumulated dust from dust drawer, dust tray, and wave inserts.

10. Place wave inserts in dust tray, then install tray and dust drawer in machine.

11. Install canister filters in machine, then rotate pivot frames up and slide latch plate left until it engages pin (see **Figure 49**).

12. Tighten knob shown in **Figure 49** to secure.

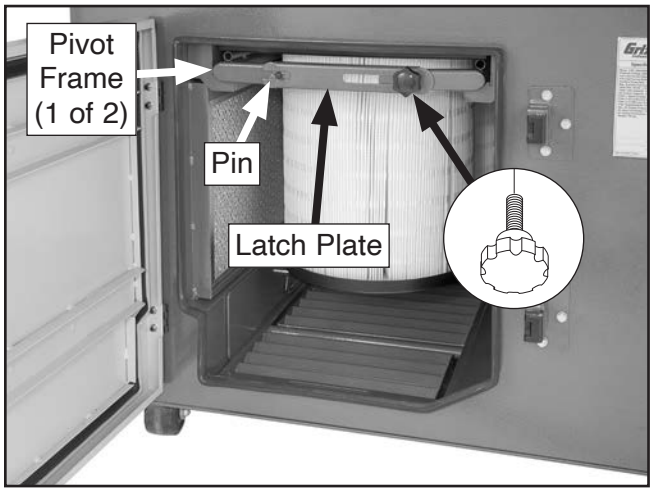


Figure 49. Canister filters secured in machine.

13. Close maintenance door and secure with maintenance door handles.

14. Dispose of collected dust according to local regulations.

Cleaning/Replacing Canister Filters

Remove and clean the canister filters when the operating pressure on the pressure gauge exceeds 6 inches of water (inAq). Replace the filters when cleaning does not improve performance.

Always clean the filters outdoors when possible. However, take special care to avoid contaminating the environment. When cleaning or replacing the filters, always inspect them and replace the filters if ANY damage or tears are found.

IMPORTANT: DO NOT use compressed air to clean the filters as it will likely cause a large amount of dust to become airborne and could also damage the filters.

⚠WARNING

Wear safety goggles, respirator, and protective gloves rated for operational fumes and waste metal type when removing and cleaning filters. Take care to minimize amount of dust allowed to become airborne, and prevent spread onto hands and clothing.

Items Needed	Qty
ANSI-Approved Safety Goggles	1 Pr.
NIOSH-Approved Respirator	1
Protective Gloves	1 Pr.
Soft Brush	1
Vacuum Cleaner w/HEPA Filter	1
Replacement Filters	As Needed

To clean/replace canister filters:

1. DISCONNECT MACHINE FROM POWER AND AIR!

⚠CAUTION

If you have just turned machine *OFF*, wait a few minutes for dust inside machine to settle before proceeding with following steps.

2. Put on personal protective equipment.

3. Pull (2) maintenance door handles to open maintenance door.

4. Loosen knob shown in **Figure 50**, then slide latch plate right.

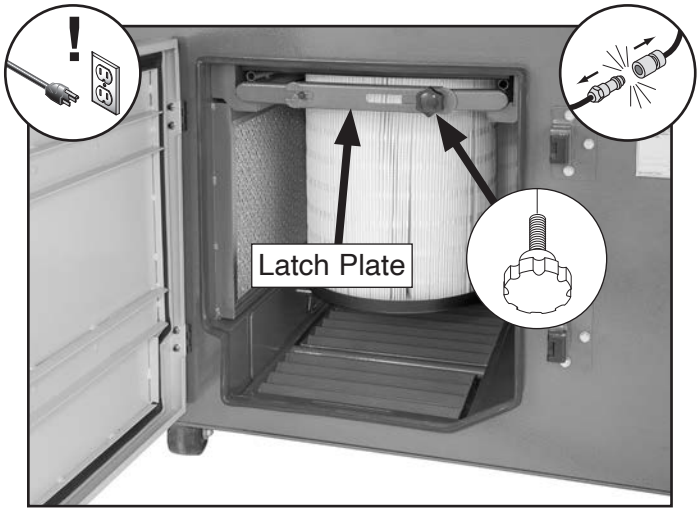


Figure 50. Location of filter retaining knob and latch plate.

5. Rotate pivot frames down, then slide canister filters out of machine (see **Figure 51**).

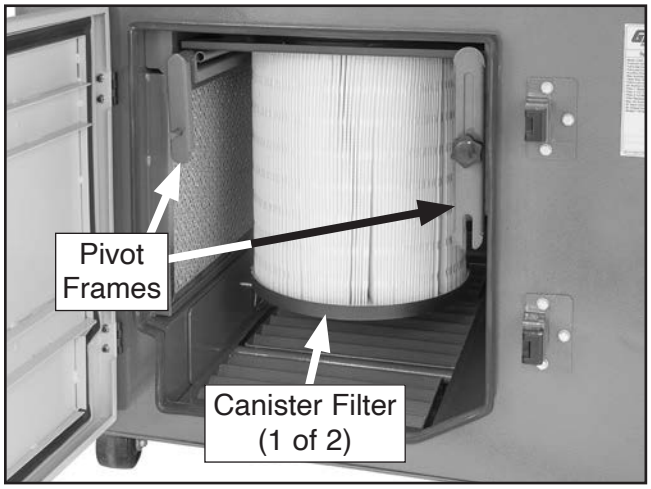


Figure 51. Pivot frames rotated down to release canister filters.

6. Move aluminum mesh filter up in order to remove it from machine (see **Figure 52**).

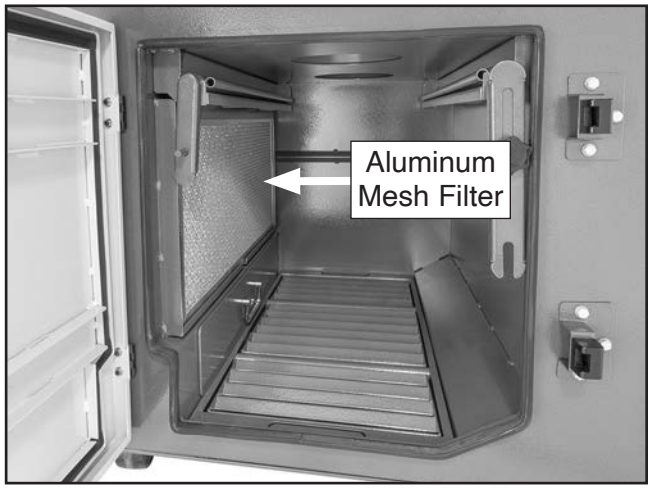


Figure 52. Location of aluminum mesh filter.

7. Flush aluminum mesh filter with water in enclosed container and allow filter to air dry.

   — If filter is worn, damaged, or too clogged to clean, replace filter (Model T33835).

8. Use soft brush and vacuum to clean dust from pleats on canister filter, then examine filters and gaskets (see **Figure 53**).

   IMPORTANT: DO NOT use water to clean canister filters. Doing so will damage filters and reduce filtration.

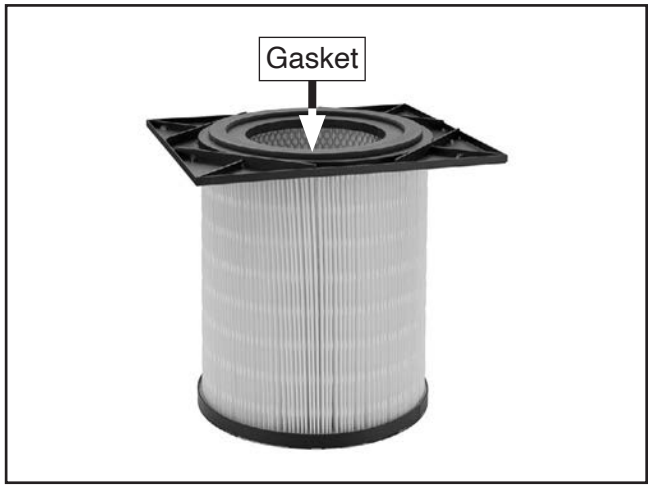


Figure 53. Location of canister filter gasket.

   — If gasket or filter is damaged, or you have already removed and cleaned canister filters and operating pressure has not improved, replace filter(s) (Model T33836).

9. Install aluminum mesh filter so air flow direction arrow on filter points in direction of machine air flow (see **Figure 54**).

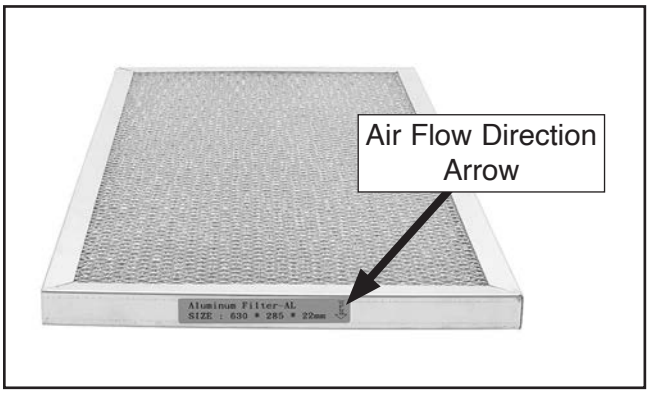


Figure 54. Location of aluminum mesh filter air flow direction arrow.

10. Install canister filters in machine, then move pivot frames up and slide latch plate left until it engages pin (see **Figure 55**).

11. Tighten knob shown in **Figure 55** to secure filters.

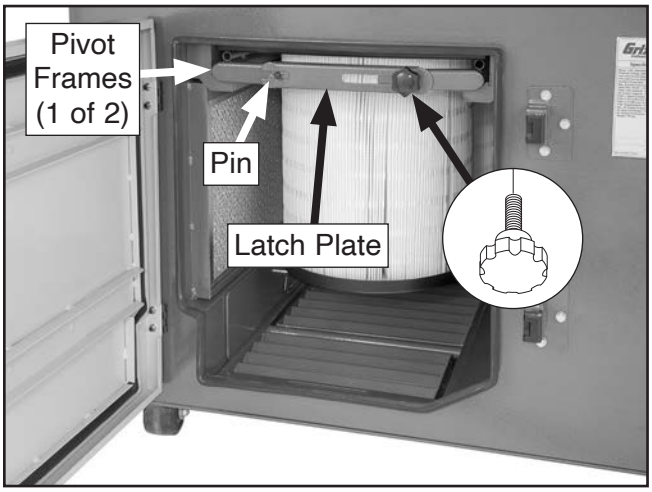


Figure 55. Canister filters secured in machine.

12. Close maintenance door and secure with maintenance door handles.

13. Dispose of any old filters, water used to clean aluminum mesh filter, and any waste collected in vacuum according to local regulations.

14. Connect downdraft table to power and turn it ***ON*** to observe operating pressure at pressure gauge.

— If operating pressure has decreased and is below 6 inAq, no further steps are required.

— If operating pressure has not decreased, or it exceeds 6 inAq, replace canister filters, then repeat **Step 14**. If operating pressure still exceeds 6 inAq, refer to **Replacing HEPA Filter**.

Replacing HEPA Filter

Replacing the HEPA filter should rarely be necessary. However, if your machine has poor air flow efficiency, and cleaning/replacing the canister filters does not remedy the situation, use the steps below.

⚠WARNING

Wear safety goggles, respirator, and protective gloves rated for operational fumes and waste metal type when handling filters. Take care to minimize amount of dust allowed to become airborne, and prevent spread onto hands and clothing.

Items Needed	Qty
ANSI-Approved Safety Goggles	1 Pr.
NIOSH-Approved Respirator	1
Protective Gloves	1 Pr.
Replacement Filter (Model T33837)	1

To replace HEPA filter:

1. DISCONNECT MACHINE FROM POWER AND AIR!

⚠CAUTION

If you have just turned machine *OFF*, wait a few minutes for dust inside machine to settle before proceeding with following steps.

2. Put on personal protective equipment.

3. Remove (12) knob bolts and fender washers shown in **Figure 56** to remove filter cage.

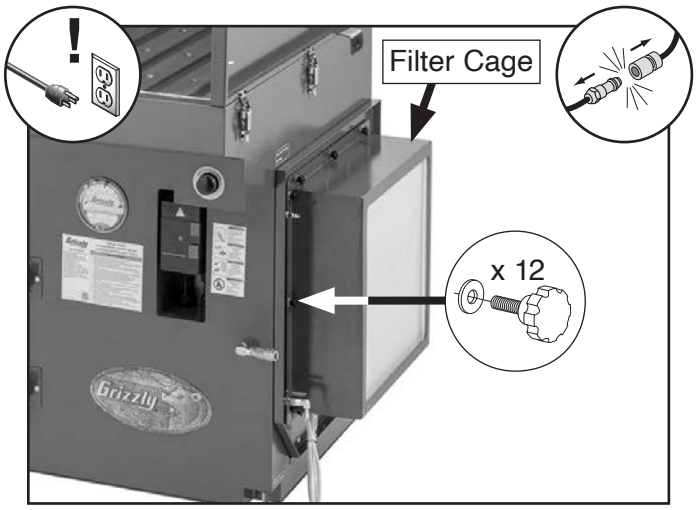


Figure 56. Location of filter cage and fasteners.

4. Remove old HEPA filter from filter cage.

5. Place new HEPA filter in filter frame so air flow direction arrow points into cage (see **Figure 57**).

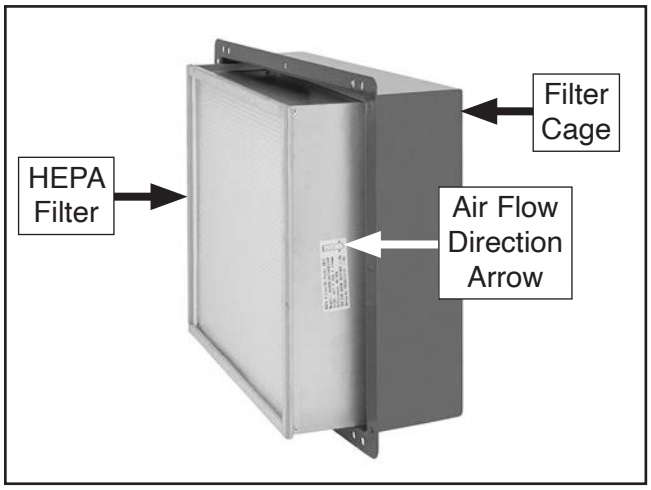


Figure 57. Placing HEPA filter in filter cage.

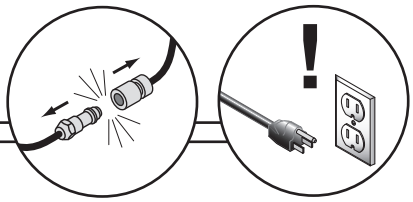
6. Attach filter cage to machine with knob bolts and fender washers removed in **Step 3**.

   Note: *If drain valve handle is open, it may interfere with this step.*

SECTION 7: SERVICE

Review the troubleshooting procedures in this section if a problem develops with your machine. If you need replacement parts or additional help with a procedure, call our Technical Support. **Note:** *Please gather the serial number and manufacture date of your machine before calling.*

Troubleshooting



Motor & Electrical

Symptom	Possible Cause	Possible Solution
Machine does not start, or power supply breaker immediately trips after startup.	1. Incorrect power supply voltage or circuit size. 2. Plug/receptacle at fault/wired incorrectly. 3. Power supply circuit breaker tripped or fuse blown. 4. Motor wires connected incorrectly. 5. Thermal overload relay has tripped/at fault. 6. Contactor not energized/at fault. 7. Wiring broken, disconnected, or corroded. 8. ON button loose/misadjusted/at fault. 9. Auxiliary contactor at fault. 10. Motor or motor bearings at fault.	1. Ensure correct power supply voltage and circuit size (**Page 13**). 2. Test for good contacts; correct wiring (**Page 45**). 3. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse. 4. Correct motor wiring connections (**Page 45**). 5. Reset. Adjust or replace if at fault. 6. Test all legs for power; replace if necessary. 7. Fix broken wires or disconnected/corroded connections (**Page 45**). 8. Tighten/adjust/replace button. 9. Replace auxiliary contactor. 10. Replace motor.
Motor rotates clockwise.	1. Power connections are wired out of phase.	1. Correct phase polarity (**Page 25**).
Machine stalls or is underpowered.	1. Motor wires connected incorrectly. 2. Downdraft table is undersized. 3. Plug/receptacle at fault/wired incorrectly. 4. Motor overheated. 5. Extension cord too long. 6. Contactor not energized/at fault. 7. Motor or motor bearings at fault.	1. Correct motor wiring connections (**Page 45**). 2. Use larger, more powerful downdraft table. 3. Test for good contacts; correct wiring (**Page 45**). 4. Clean motor, let cool, and reduce workload. 5. Move machine closer to power supply; use shorter extension cord (**Page 14**). 6. Test all legs for power; repair/replace if at fault. 7. Replace motor.
Machine has vibration or noisy operation.	1. Motor loose. 2. Motor fan rubbing on fan cover. 3. Motor bearings at fault.	1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Fix/replace fan cover; replace loose/damaged fan. 3. Test by rotating shaft; rotational grinding/loose shaft requires bearing replacement.
Work light AND auxiliary power tool do not turn ***ON***, or auxiliary power supply breaker immediately trips after startup.	1. Switch disabling key removed. 2. Circuit breaker tripped. 3. Incorrect power supply voltage or circuit size. 4. Power supply circuit breaker tripped or fuse blown. 5. Wiring broken, disconnected, or corroded. 6. ON/OFF switch or circuit breaker at fault.	1. Install switch disabling key. 2. Reset circuit breaker (**Page 5**). 3. Ensure correct power supply voltage and circuit size (**Page 13**). 4. Ensure circuit is free of shorts. Reset circuit breaker or replace fuse. 5. Fix broken wires or disconnected/corroded connections (**Page 45**). 6. Replace switch/circuit breaker.

Motor & Electrical (Cont.)

Symptom	Possible Cause	Possible Solution
Work light does not illuminate.	1. Bulb burnt out. 2. Wiring broken, disconnected, or corroded. 3. Circuit board at fault.	1. Replace work light. 2. Fix broken wires or disconnected/corroded connections (**Page 45**). 3. Inspect/replace if at fault.
Work light illuminates but tool connected to auxiliary power does not turn ***ON***.	1. Wiring broken, disconnected, or corroded. 2. Auxiliary 5-15 receptacle at fault/wired incorrectly.	1. Fix broken wires or disconnected/corroded connections (**Page 45**). 2. Test for good contacts; correct wiring (**Page 45**).
Work light and auxiliary power stalls or is underpowered.	1. Extension cord too long.	1. Move machine closer to power supply; use shorter extension cord (**Page 16**).

Operation

Symptom	Possible Cause	Possible Solution
Machine does not adequately collect fumes or dust; poor performance.	1. Maintenance door is not fully closed. 2. Table intake/airflow is blocked. 3. Power connections are wired out of phase; impeller is rotating in wrong direction. 4. Collecting wrong material. 5. Dust tray/drawer is full. 6. Filter(s) clogged/at end of life. 7. Seals/gaskets are leaking. 8. Downdraft table is undersized.	1. Securely latch maintenance door. 2. Clear blockages. 3. Correct phase polarity (**Page 25**). 4. Only collect non-combustible metal and metal fumes with this machine. 5. Empty dust tray/drawer (**Page 35**). 6. Clean/replace canister filter(s) (**Page 37**), replace HEPA filter (**Page 39**). 7. Seal leaks. 8. Use larger, more powerful downdraft table.
Loud, repetitious noise, or excessive vibration coming from machine (non-motor related).	1. Component loose. 2. Casters not locked; casters or machine feet not adjusted correctly. 3. Workpiece loose. 4. Impeller damaged and unbalanced. 5. Impeller loose on motor shaft.	1. Replace damaged or missing bolts/nuts or tighten if loose. 2. Lock casters; adjust casters or machine feet. 3. Use correct holding fixture and reclamp workpiece. 4. Inspect impeller for buildup, cracks or damage; clean impeller, replace if damaged. 5. Secure impeller; replace motor and impeller as a set if motor shaft and impeller hub are damaged.
Air pulse clean will not function or is underpowered.	1. No compressed air supply is attached. 2. Drain valve is open. 3. Air supply hose or delivery system is too long. 4. Air supply regulator needs to be adjusted for higher airflow delivery; regulator at fault. 5. Safety relief valve at fault/leaking. 6. Compressor is undersized. 7. Air supply filter or in-line filter is damaged or clogged (if used). 8. Air supply in-line water separator is full (if used).	1. Attached compressed air supply (**Page 29**). 2. Close drain valve (**Page 35**). 3. Use shorter hose/delivery system. 4. Adjust regulator to higher airflow delivery (DO NOT exceed 90 PSI); replace regulator. 5. Test/replace. 6. Use compressor capable of higher airflow delivery. 7. Replace air supply filter or in-line filter assembly. 8. Drain air supply water separator.

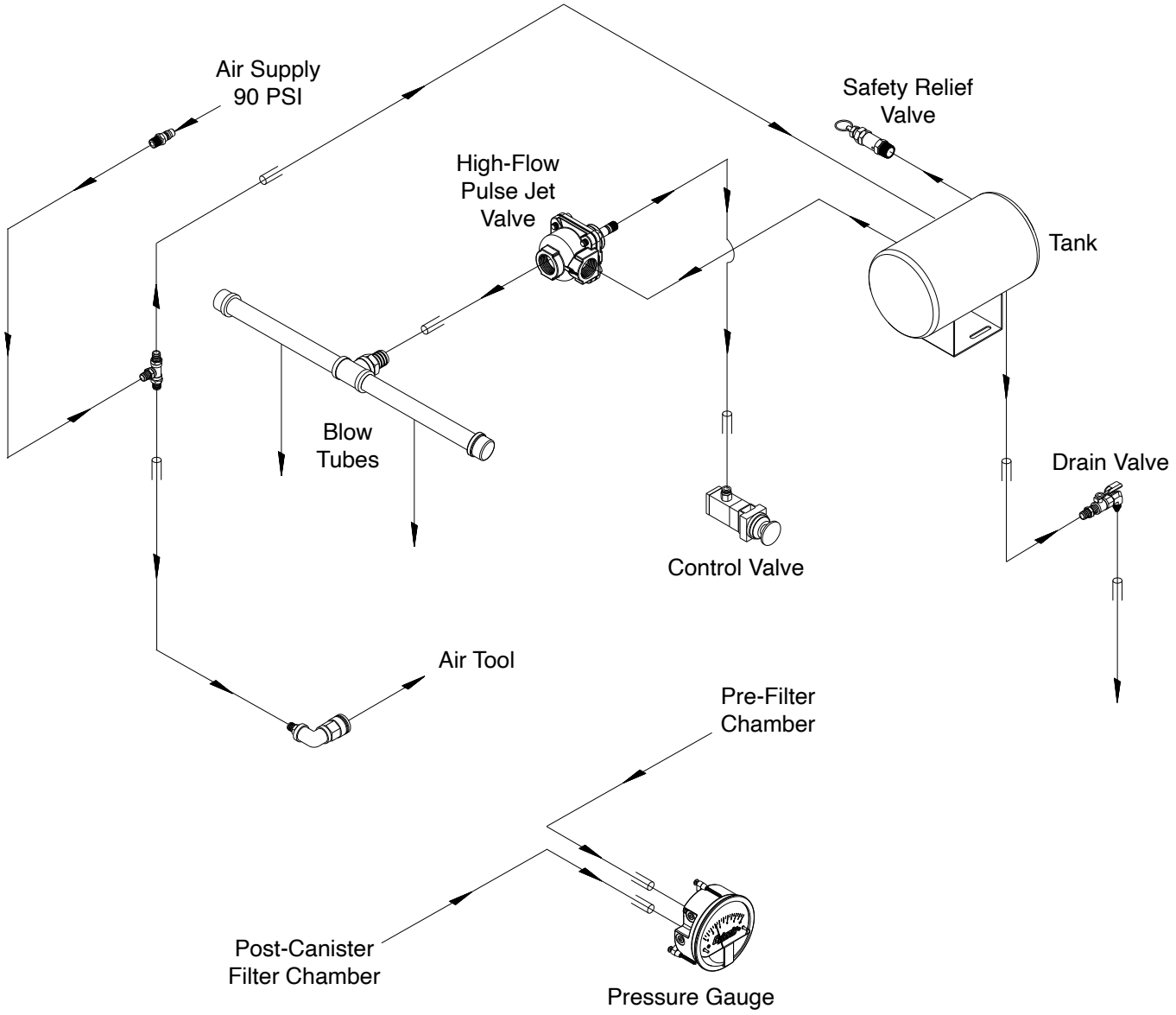
Operation (Cont.)

Symptom	Possible Cause	Possible Solution
Air pulse clean will not function or is underpowered.	9. Air leaks in air supply hose or delivery system. 10. Control or pulse jet valve at fault.	9. Check air hose/delivery system and all connections for leaks. 10. Test/replace.
Attached air supply from compressor is dirty or excessively moist.	1. Downdraft table tank needs to be drained. 2. In-line water separator is full (if used). 3. In-line filter or water separator is needed in air supply line. 4. Delivery pipes are dirty (if used).	1. Open drain valve to drain condensation, then close (**Page 35**). 2. Drain water separator. 3. Install in-line filter and water separator in air supply line. 4. Remove delivery pipes; clean out and replace.
Safety relief valve leaks.	1. Safety relief valve at fault.	1. Test/replace.
Connected air tool has low supply pressure, but air pulse clean is NOT underpowered.	1. Air tool hose is too long. 2. Air tool in-line regulator needs to be adjusted for higher airflow delivery; air tool in-line regulator at fault (if used). 3. Compressor is undersized. 4. Air tool in-line filter is damaged or clogged (if used). 5. Air tool in-line water separator is full (if used). 6. Air leaks in air tool hose.	1. Use shorter hose. 2. Adjust air tool in-line regulator to higher airflow delivery (DO NOT exceed pressure rating of air tool); replace air tool in-line regulator. 3. Use smaller air tool or compressor capable of higher airflow delivery. 4. Replace air tool filter or in-line filter assembly. 5. Drain air tool water separator. 6. Check air tool hose and all connections for leaks.
Connected air tool has watery discharge or gets cold and freezes up with ice during use.	1. Downdraft table tank needs to be drained. 2. In-line water separator is full (if used). 3. Ambient environment has too much humidity.	1. Open drain valve to drain condensation, then close (**Page 35**). 2. Drain water separator. 3. Install in-line air dryer and water separator.
Connected air tool has oily discharge.	1. Downdraft table tank needs to be drained. 2. Air tool in-line oiler is out of adjustment (if used). 3. In-line filter is damaged or missing (if used).	1. Open drain valve to drain condensation, then close (**Page 35**). 2. Adjust air tool in-line oiler drip ratio or use correct viscosity oil. 3. Replace filter or in-line filter assembly.

SECTION 8: PNEUMATIC SYSTEM

Before making any changes to the pneumatic system on your machine, refer to **Page 11** for safety information about compressed air to reduce your risk of injury.

Pneumatic System Diagram



Pneumatic Component Photos

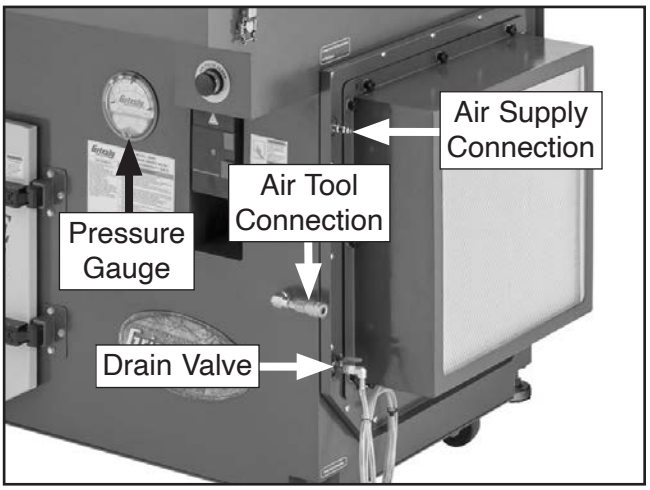


Figure 58. Outer pneumatic components.

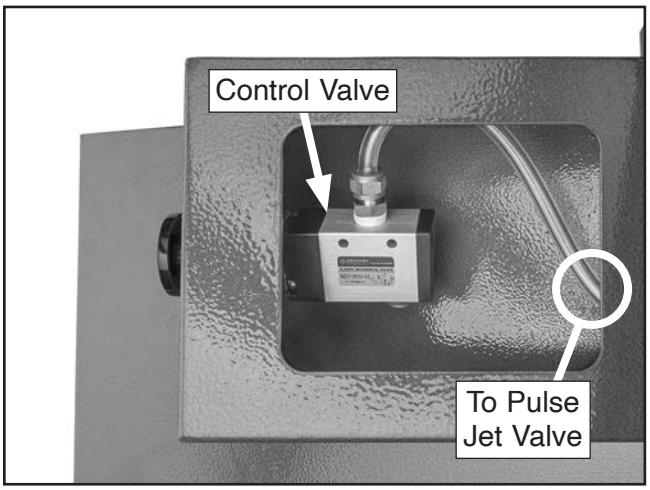


Figure 60. Control valve.

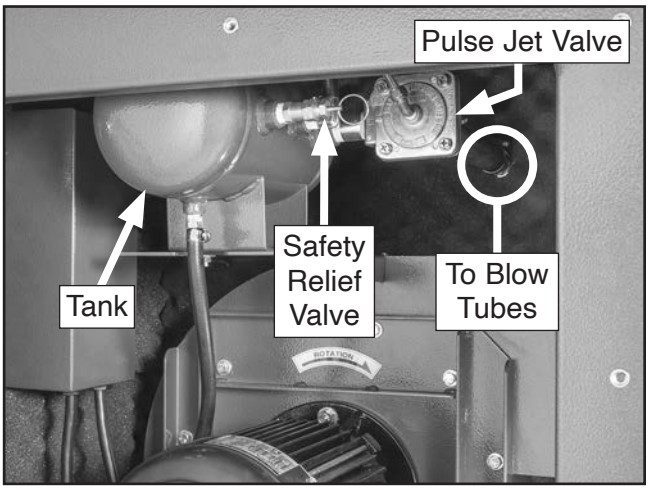


Figure 59. Tank and pulse jet valve.

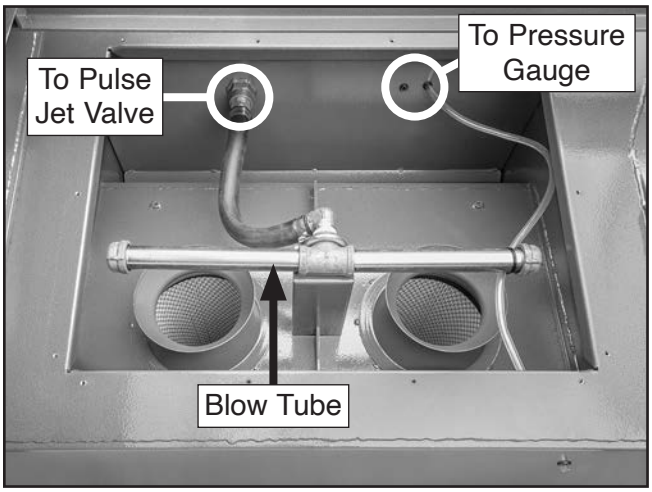


Figure 61. Blow tubes.

SECTION 9: WIRING

These pages are current at the time of printing. However, in the spirit of improvement, we may make changes to the electrical systems of future machines. Compare the manufacture date of your machine to the one stated in this manual, and study this section carefully.

If there are differences between your machine and what is shown in this section, call Technical Support at (570) 546-9663 for assistance BEFORE making any changes to the wiring on your machine. An updated wiring diagram may be available. **Note:** *Please gather the serial number and manufacture date of your machine before calling. This information can be found on the main machine label.*

⚠WARNING
Wiring Safety Instructions

SHOCK HAZARD. Working on wiring that is connected to a power source is extremely dangerous. Touching electrified parts will result in personal injury including but not limited to severe burns, electrocution, or death. Disconnect the power from the machine before servicing electrical components!

MODIFICATIONS. Modifying the wiring beyond what is shown in the diagram may lead to unpredictable results, including serious injury or fire. This includes the installation of unapproved aftermarket parts.

WIRE CONNECTIONS. All connections must be tight to prevent wires from loosening during machine operation. Double-check all wires disconnected or connected during any wiring task to ensure tight connections.

CIRCUIT REQUIREMENTS. You MUST follow the requirements at the beginning of this manual when connecting your machine to a power source.

WIRE/COMPONENT DAMAGE. Damaged wires or components increase the risk of serious personal injury, fire, or machine damage. If you notice that any wires or components are damaged while performing a wiring task, replace those wires or components.

MOTOR WIRING. The motor wiring shown in these diagrams is current at the time of printing but may not match your machine. If you find this to be the case, use the wiring diagram inside the motor junction box.

CAPACITORS/INVERTERS. Some capacitors and power inverters store an electrical charge for up to 10 minutes after being disconnected from the power source. To reduce the risk of being shocked, wait at least this long before working on capacitors.

EXPERIENCING DIFFICULTIES. If you are experiencing difficulties understanding the information included in this section, contact our Technical Support at (570) 546-9663.

NOTICE

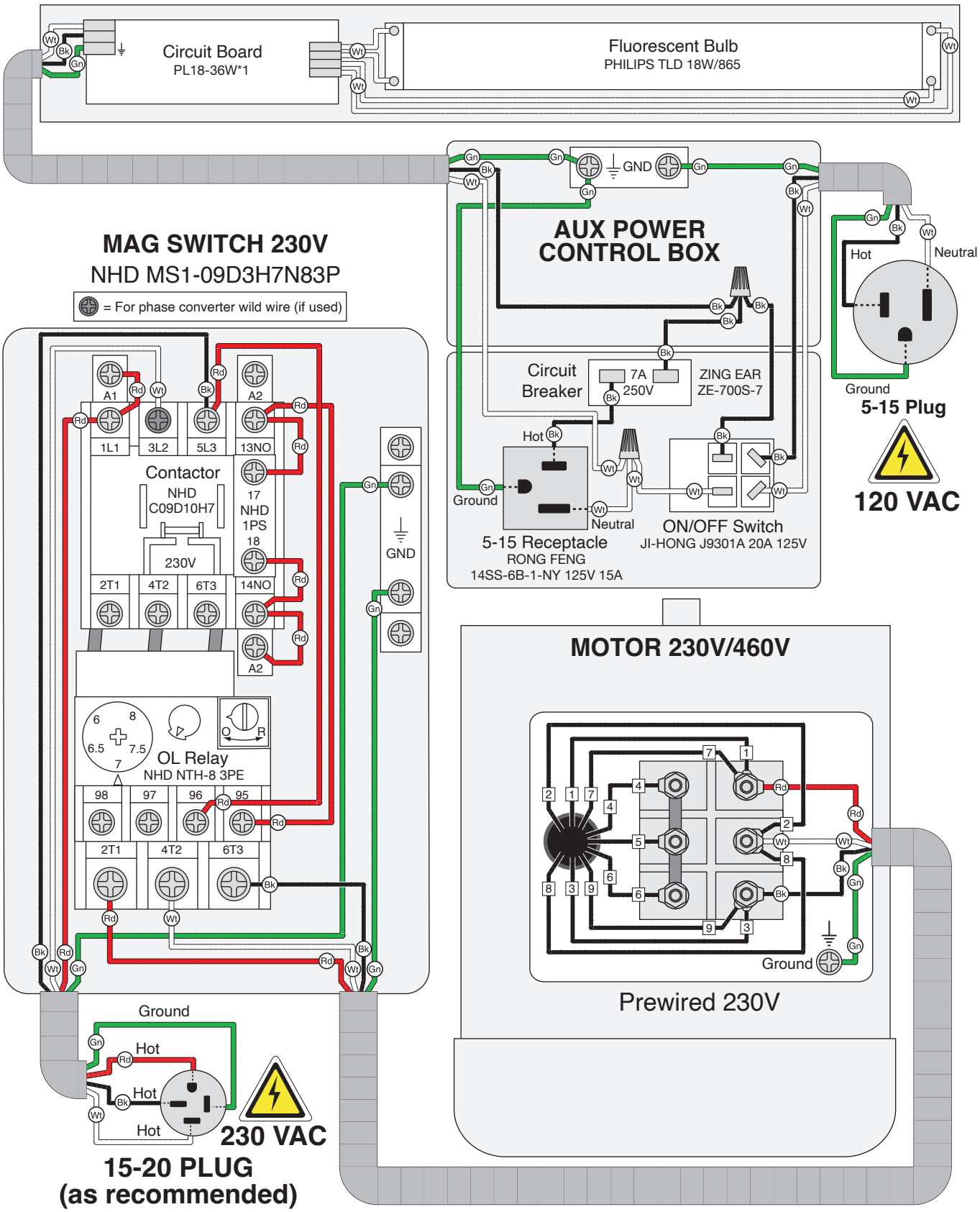
The photos and diagrams included in this section are best viewed in color. You can view these pages in color at www.grizzly.com.

COLOR KEY

BLACK	Bk	BLUE	Bl	YELLOW	Yl	LIGHT BLUE	Lb
WHITE	Wt	BROWN	Br	YELLOW GREEN	Yg	BLUE WHITE	Bw
GREEN	Gn	GRAY	Gy	PURPLE	Pu	TURQUOISE	Tu
RED	Rd	ORANGE	Or	PINK	Pk		

Wiring Diagram (Main Power Supply 230V)

WORK LIGHT GOLDEN GWDE120



STOP ***READ ELECTRICAL SAFETY ON PAGE 45!***

Electrical Component Photos

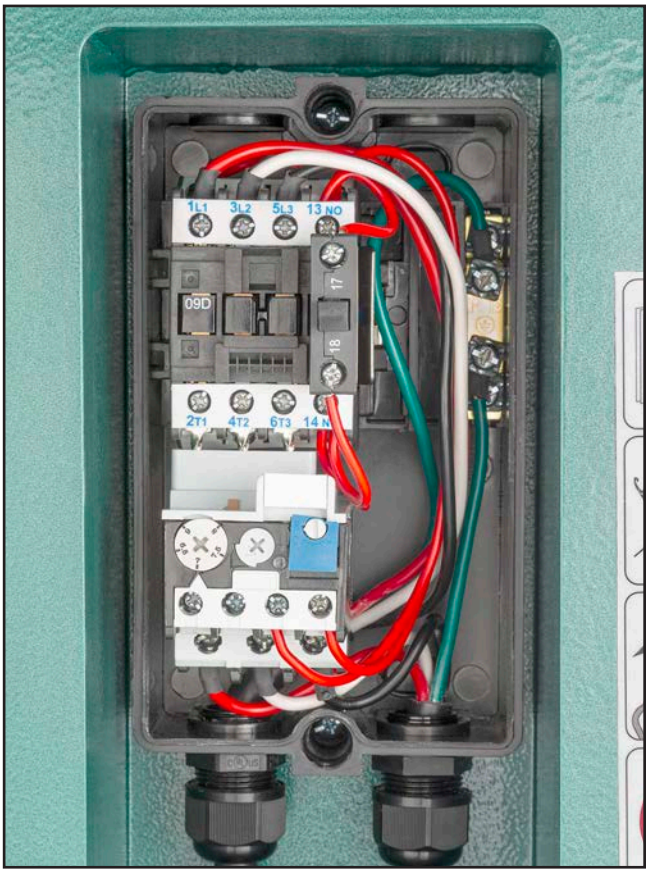


Figure 62. Magnetic switch wiring (230V).

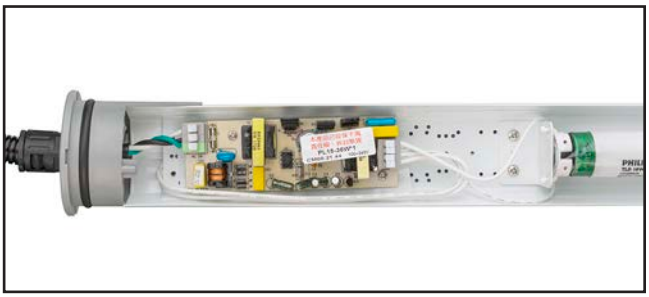


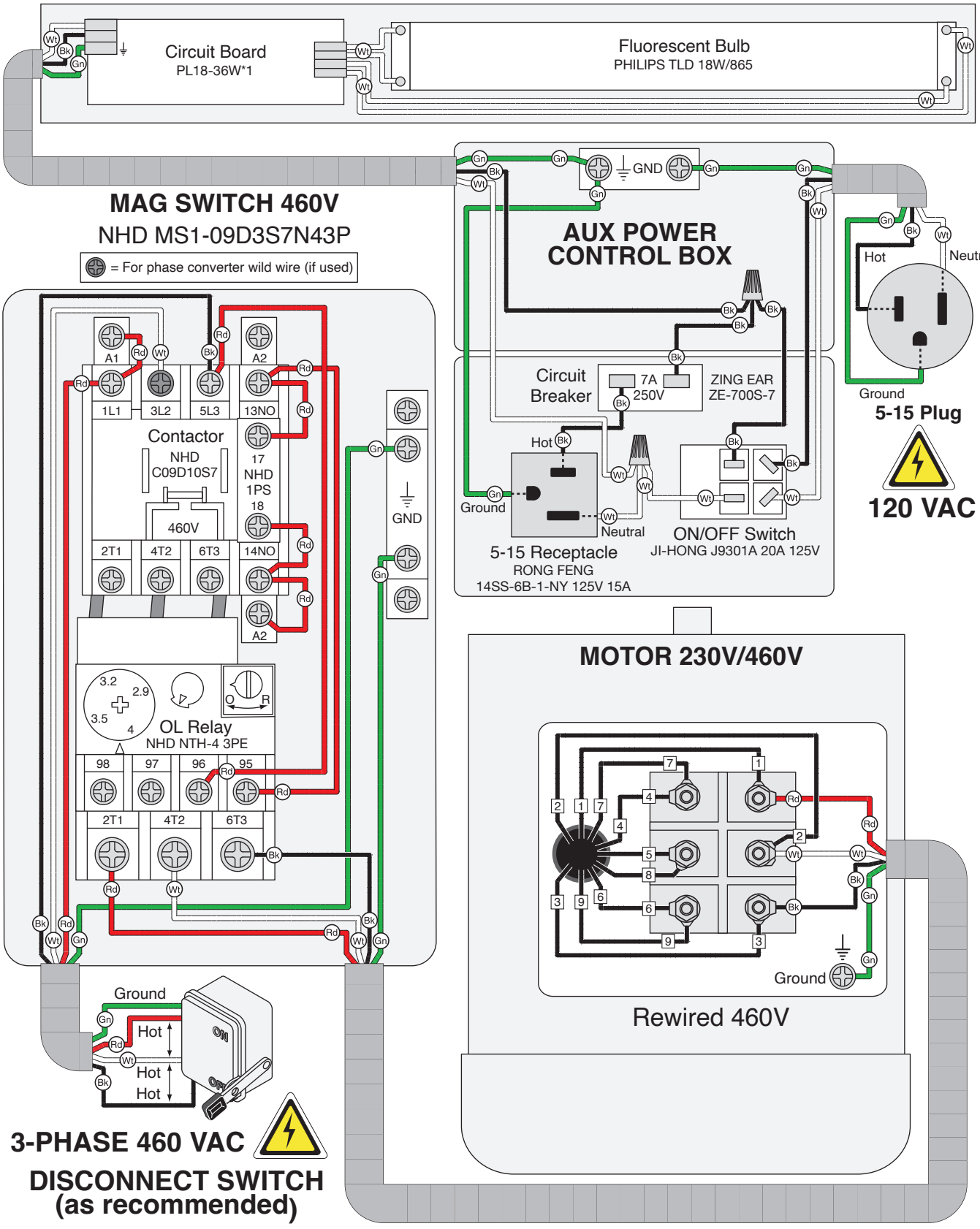
Figure 63. Work light wiring.

Figure 64. Motor junction box wiring (230V).

Figure 65. Auxiliary power control box wiring.

Wiring Diagram (Main Power Supply 460V)

WORK LIGHT GOLDEN GWDE120



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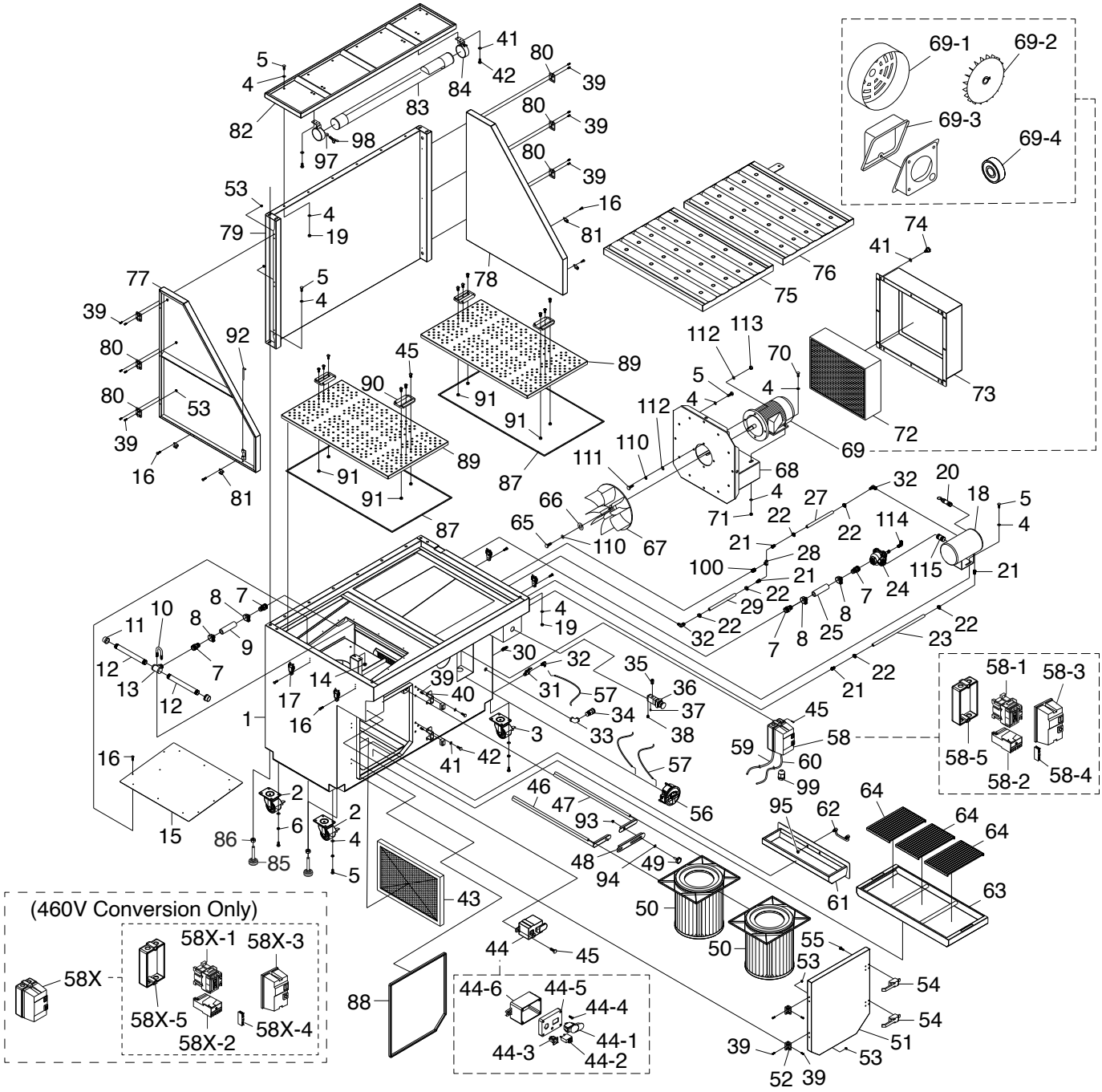
SECTION 10: PARTS

We do our best to stock replacement parts when possible, but we cannot guarantee that all parts shown are available for purchase. Call **(800) 523-4777** or visit **www.grizzly.com/parts** to check for availability.

Main



REF	PART #	DESCRIPTION
1	P0965001	MACHINE BODY
2	P0965002	CASTER 3" SWIVEL
3	P0965003	CASTER 3" LOCKING
4	P0965004	FLAT WASHER 5/16
5	P0965005	HEX BOLT 5/16-18 X 3/4
6	P0965006	LOCK WASHER 5/16

Main Parts List (Cont.)

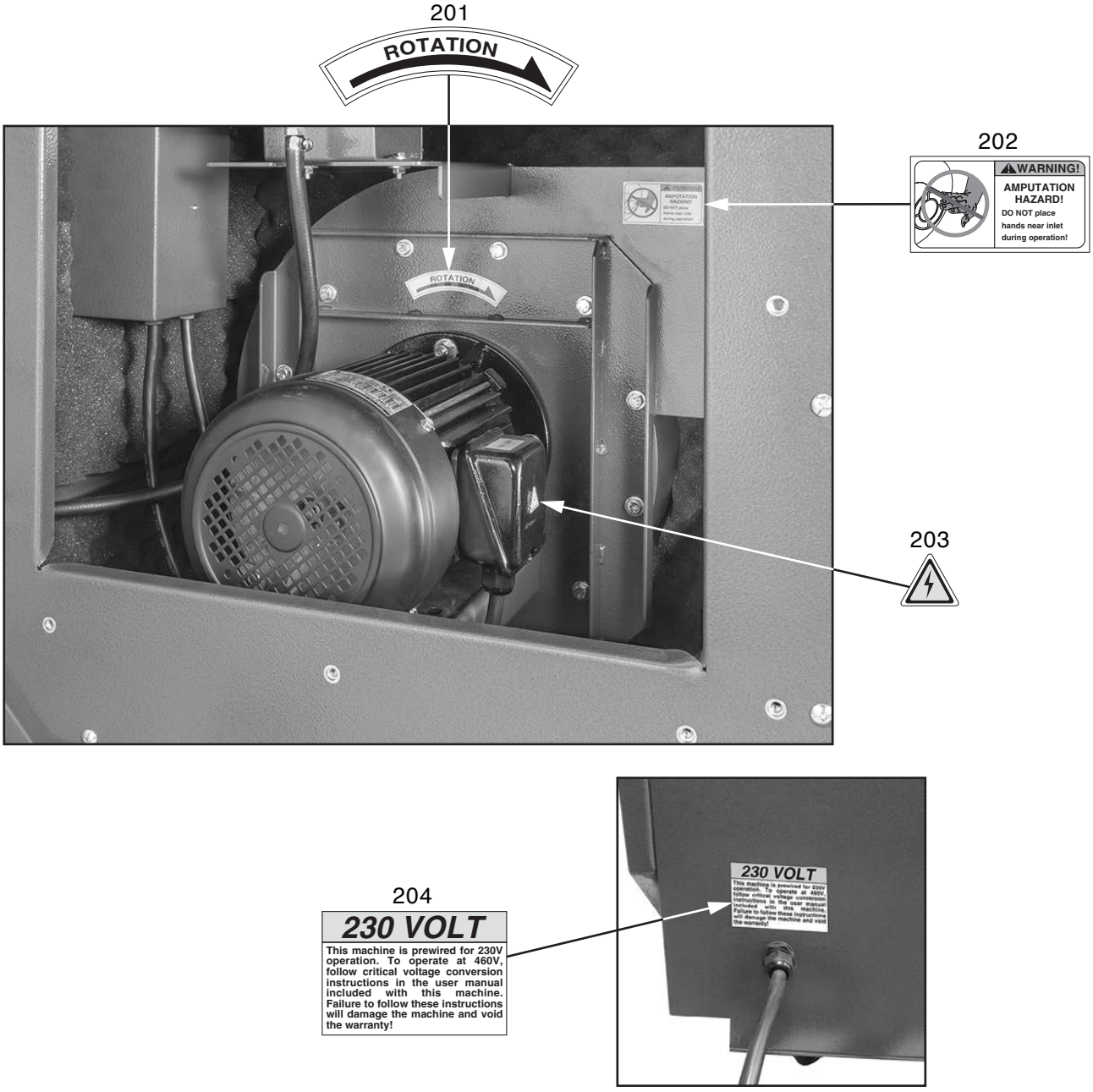
REF	PART #	DESCRIPTION
7	P0965007	HOSE FITTING 3/4 PT STRAIGHT BARBED
8	P0965008	HOSE CLAMP 3/4"
9	P0965009	HOSE 3/4" X 16"
10	P0965010	U-BOLT 3/8-16 X 1, 1-1/8
11	P0965011	CAP 3/4 PT
12	P0965012	PIPE 3/4 PT X 8-5/16 PERFORATED
13	P0965013	T-FITTING 3/4 PT
14	P0965014	FLANGE NUT 3/8-16
15	P0965015	COVER PLATE
16	P0965016	TAP SCREW #8 X 1/2
17	P0965017	LATCH
18	P0965018	AIR TANK
19	P0965019	HEX NUT 5/16-18
20	P0965020	SAFETY RELIEF VALVE
21	P0965021	HOSE FITTING 1/4 PT STRAIGHT BARBED
22	P0965022	HOSE CLAMP 1/4"
23	P0965023	HOSE 1/4" X 18"
24	P0965024	HIGH-FLOW PULSE VALVE
25	P0965025	HOSE 3/4" X 8"
27	P0965027	HOSE 1/4" X 21-11/16
28	P0965028	T-FITTING 1/4 PT
29	P0965029	HOSE 1/4" X 8-11/16"
30	P0965030	HOSE FITTING 1/4 NPT (MALE)
31	P0965031	BALL DRAIN VALVE 1/4 PT
32	P0965032	ELBOW FITTING 1/4 PT 90 DEG BARBED
33	P0965033	ELBOW FITTING 1/4 PT X 1/4 NPT
34	P0965034	HOSE FITTING 1/4 NPT (FEMALE)
35	P0965035	FITTING 1/4 PT X 5/16"
36	P0965036	CONTROL VALVE SHAKO MSV9832-02PBB
37	P0965037	COMPRESSION FITTING 1/4 PT X 8MM
38	P0965038	MUFFLER 1/4 PT
39	P0965039	CAP SCREW M5-.8 X 12
40	P0965040	LATCH BASE
41	P0965041	FENDER WASHER 1/4
42	P0965042	HEX BOLT 1/4-20 X 3/4
43	P0965043	FILTER ALUMINUM MESH 630 X 285 X 22MM
44	P0965044	AUX POWER CONTROL BOX ASSEMBLY
44-1	P0965044-1	ON/OFF SWITCH JI-HONG J9301A 20A/125V
44-2	P0965044-2	CIRCUIT BREAKER ZE-700S-7 250VAC 7A
44-3	P0965044-3	RECEPTACLE 5-15 125V 15A
44-4	P0965044-4	TAP SCREW 5/32 X 1
44-5	P0965044-5	CONTROL BOX COVER
44-6	P0965044-6	CONTROL BOX HOUSING
45	P0965045	PHLP HD SCR 10-24 X 1/2
46	P0965046	PIVOT FRAME (LEFT)
47	P0965047	PIVOT FRAME (RIGHT)
48	P0965048	LATCH PLATE
49	P0965049	KNOB BOLT 5/16-18 X 1, 5-LOBE, D20
50	P0965050	CANISTER FILTER
51	P0965051	MAINTENANCE DOOR
52	P0965052	HINGE
53	P0965053	FLANGE NUT M5-.8
54	P0965054	COMPRESSION LATCH ASSEMBY
55	P0965055	FLAT HD CAP SCR M5-.8 X 14
56	P0965056	PRESSURE GAUGE 0-10"/H20
57	P0965057	HOSE 5 X 8 X 1500MM
58	P0965058	MAGNETIC SWITCH 230V NHD MS1-09D3H7N83P
58-1	P0965058-1	CONTACTOR NHD C-09D10H7 230V
58-2	P0965058-2	OL RELAY NHD NTH-8 3PE 6-8A
58-3	P0965058-3	MAGNETIC SWITCH COVER
58-4	P0965058-4	AUX. CONTACTOR NHD 1P 1A 600V
58-5	P0965058-5	MAGNETIC SWITCH BASE
58X	P0965058X	MAGNETIC SWITCH 460V NHD MS1-09D3S7N43P
58X-1	P0965058X-1	CONTACTOR NHD C-09D10S7 460V
58X-2	P0965058X-2	OL RELAY NHD NTH-4 3PE 2.9-4A
58X-3	P0965058X-3	MAGNETIC SWITCH COVER
58X-4	P0965058X-4	AUX. CONTACTOR NHD 1P 1A 600V
58X-5	P0965058X-5	MAGNETIC SWITCH BASE
59	P0965059	POWER CORD 14G 4W 118"
60	P0965060	MOTOR CORD 14G 4W 59"
61	P0965061	DUST DRAWER
62	P0965062	DRAWER HANDLE
63	P0965063	DUST TRAY
64	P0965064	WAVE INSERT
65	P0965065	HEX BOLT 3/8-16 X 1
66	P0965066	FLAT WASHER 3/8 X 1-3/4 X 1/8
67	P0965067	IMPELLER 12-1/8"
68	P0965068	MOTOR BRACKET
69	P0965069	MOTOR 2HP 230V/460V 3PH
69-1	P0965069-1	MOTOR FAN COVER
69-2	P0965069-2	MOTOR FAN
69-3	P0965069-3	JUNCTION BOX
69-4	P0965069-4	BALL BEARING 6305ZZ
70	P0965070	HEX BOLT 5/16-18 X 1-1/2
71	P0965071	LOCK NUT 5/16-18
72	P0965072	HEPA FILTER 457 X 508 X 150MM
73	P0965073	FILTER CAGE
74	P0965074	KNOB BOLT 1/4-20 X 3/4, 6-LOBE, D35
75	P0965075	TABLE GRATE W/HOLES (LEFT)
76	P0965076	TABLE GRATE W/HOLES (RIGHT)
77	P0965077	SIDE DOOR (LEFT)
78	P0965078	SIDE DOOR (RIGHT)
79	P0965079	BACK WALL
80	P0965080	HINGE
81	P0965081	STRIKE PLATE SIDE DOOR
82	P0965082	TOP COVER
83	P0965083	WORK LIGHT ASSEMBLY GOLDEN GWDE120
84	P0965084	WORK LIGHT CLAMP
85	P0965085	ADJUSTABLE FOOT M16-2 X 150
86	P0965086	HEX NUT M16-2
87	P0965087	TABLE PANEL GASKET
88	P0965088	MAINTENANCE DOOR GASKET
89	P0965089	TABLE PANEL W/HOLES
90	P0965090	HANDLE
91	P0965091	HEX NUT 10-24
92	P0965092	L-HANDLE SPRING PLUNGER
93	P0965093	ACORN NUT 5/16-18
94	P0965094	FENDER WASHER 5/16
95	P0965095	HEX NUT M10-1
97	P0965097	SPACER
98	P0965098	THUMB SCREW M6-1 X 30
99	P0965099	STRAIN RELIEF TYPE-3 PG13.5
100	P0965100	PIPE FITTING 1/4 PT
110	P0965110	LOCK WASHER 3/8
111	P0965111	HEX BOLT 3/8-16 X 1-1/2
112	P0965112	FLAT WASHER 3/8
113	P0965113	LOCK NUT 3/8-16
114	P0965114	ELBOW FITTING 1/8 PT 90 DEG PUSH-IN
115	P0965115	PIPE 3/4 PT X 2-3/8"

Labels & Cosmetics (Front)

REF	PART #	DESCRIPTION
101	P0965101	MODEL NUMBER LABEL
102	P0965102	ELECTRICITY LABEL
103	P0965103	AIR PULSE LABEL
104	P0965104	COMBO WARNING LABEL
105	P0965105	MACHINE ID LABEL

REF	PART #	DESCRIPTION
106	P0965106	GRIZZLY LOGO PLATE
107	P0965107	CLOSE DOOR LABEL
108	P0965108	EXTREME SERIES LABEL
109	P0965109	MAX LOAD LABEL

Labels & Cosmetic (Rear)



REF	PART #	DESCRIPTION
201	P0965201	ROTATION DIRECTION LABEL
202	P0965202	AMPUTATION HAZARD LABEL

REF	PART #	DESCRIPTION
203	P0965203	ELECTRICITY LABEL
204	P0965204	230 VOLT LABEL

⚠WARNING

Safety labels help reduce the risk of serious injury caused by machine hazards. If any label comes off or becomes unreadable, the owner of this machine MUST replace it in the original location before resuming operations. For replacements, contact (800) 523-4777 or www.grizzly.com.

WARRANTY & RETURNS

Grizzly Industrial, Inc. warrants every product it sells for a period of **1 year** to the original purchaser from the date of purchase. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence, accidents, repairs or alterations or lack of maintenance. This is Grizzly's sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant or represent that the merchandise complies with the provisions of any law or acts unless the manufacturer so warrants. In no event shall Grizzly's liability under this warranty exceed the purchase price paid for the product and any legal actions brought against Grizzly shall be tried in the State of Washington, County of Whatcom.

We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special, or consequential damages arising from the use of our products.

The manufacturers reserve the right to change specifications at any time because they constantly strive to achieve better quality equipment. We make every effort to ensure that our products meet high quality and durability standards and we hope you never need to use this warranty.

In the event you need to use this warranty, contact us by mail or phone and give us all the details. We will then issue you a "Return Number," which must be clearly posted on the outside as well as the inside of the carton. We will not accept any item back without this number. Proof of purchase must accompany the merchandise.

Please feel free to write or call us if you have any questions about the machine or the manual.

Thank you again for your business and continued support. We hope to serve you again soon.

For further information about the warranty, visit **https://www.grizzly.com/forms/warranty** or scan the QR code below to be automatically directed to our warranty page.

WARRANTY

grizzly.com